### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

-	DAA	2
	RM	-5

AMENDED REPORT (highlight changes)

			and the second second						
	A	PPLICAT	ION FOR	PERMIT TO	D DRILL		5. MINERAL LEASE NO: ST ML 23609		s. surface: State
1A. TYPE OF WO	ORK: DF	RILL 🔽 I	REENTER	DEEPEN			7. IF INDIAN, ALLOTTEE	OR TR	BE NAME:
B. TYPE OF WE	ELE OIL	GAS 🗹	OTHER	SIN	GLE ZONE MULTIPLE ZON	E 🗾	8. UNIT or CA AGREEME 891008900A	NT NAM	ΛE:
2. NAME OF OPE	RATOR:		·	<del></del>			9. WELL NAME and NUM	IBER:	
Kerr-McGe	e Oil & Gas	Onshore, LI	<b>5</b>			ı	NBU 1022-07/		
3. ADDRESS OF		D		00 00	PHONE NUMBER:		10. FIELD AND POOL, C		
P.O. Box 1	73779 WELL(FOOTAGES	CITY Denve			217-3779 (720) 929-6226		Natural Buttes		
	55	· 60000	₽4Х 442 АТ 39.97005	5335 Y 53 LON-109.	<i>39-9</i> 7 60 <i>3</i> 0 .474708 (NAD 27)		11. QTR/QTR, SECTION MERIDIAN:  NENE 7		SHIP, RANGE,
AT PROPOSEE	PRODUCING ZON	E: N/A			-109.474683			100	225
14. DISTANCE IN	MILES AND DIREC	CTION FROM NEAF	EST TOWN OR POS	ST OFFICE:	- <del>Ligardo Comercianos de Como Como Como Como Como Como Como Com</del>		12. COUNTY:	1	3. STATE:
22.5 mile	s south of O	uray, Utah					Uintah		UTAH
15. DISTANCE TO	O NEAREST PROPE	RTY OR LEASE LI	NE (FEET)	16. NUMBER O	F ACRES IN LEASE:	17. NL	JMBER OF ACRES ASSIG	NED TO	THIS WELL:
266'				ŀ	294.22				40
18. DISTANCE TO	O NEAREST WELL	(DRILLING, COMPL	ETED, OR	19. PROPOSED	<u> </u>	20. BC	OND DESCRIPTION:		
APPLIED FOR 500'	R) ON THIS LEASE	(FEET)			9,200	i	B0005237		
	(SHOW WHETHER	DE RT GR ETC	)·	22 APPROVIM	ATE DATE WORK WILL START:		STIMATED DURATION:		
5244' GR	,	(DI, ICI, OIGETO.	<i>)-</i>	22. AFFROXIVI	ATE DATE WORK WILL START.		days		
		<del> </del>	· · · · · · · · · · · · · · · · · · ·		<del></del>	10	uays		
24.		<u></u>	PROPOSI	ED CASING A	ND CEMENTING PROGRAM				
SIZE OF HOLE	CASING SIZE, O	RADE, AND WEIG	HT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUA	ANTITY,	YIELD, AND SLURRY WE	GHT	
12 1/4"	9 5/8"	J-55	36#	2,200	Premium Cement	2	15 sx 1	.18	15.6
					Premium Cement	10	00 sx 1	.18	15.6
			**						
7 7/8"	4 1/2"	I-80	11.6#	9,200	Premium Lite II	4	40 sx 3	.38	11.0
					50/50 Poz G	14	50 sx 1	.31	14.3
<del></del>	<del></del>	<del></del>		· · · · · · · · · · · · · · · · · · ·					
							· · · · · · · · · · · · · · · · · · ·		<u> </u>
25.	-			ATTA	CHMENTS				
VERIFY THE FOL	LOWING ARE ATT	ACHED IN ACCOR	DANCE WITH THE U	TAH OIL AND GAS C	ONSERVATION GENERAL RULES:		<u> </u>		
177					1 🖂				
WELLPL	AT OR MAP PREPA	MED BY FICENSEI	SURVEYOR OR EN	NGINEER	COMPLETE DRILLING PLAN				
✓ EVIDENO	CE OF DIVISIÓN OF	WATER RIGHTS A	PPROVAL FOR USE	OF WATER	FÖRM 5, IF OPERATOR IS PE	RSON O	R COMPANY OTHER THA	N THE !	"EASE OWNER
	· · · · · · · · · · · · · · · · · · ·			·			<u> </u>		
NAME (PLEASE	PRINT) Kevin I	McIntyre			TITLE Regulatory An	alyst	<u> </u>	· · ·	
SIGNATURE		· m		·	DATE 7/14/2008		·		
(This space for Sta	te use only)			3			RF	CF	EIVED
	ر نو	12-110.	1-0:10				JU	L 2	2 2008
API NUMBER AS	SIGNED: $\underline{\mathcal{G}}$	3-047-4	10248		APPROVAL:				

#### Kerr-McGee Oil & Gas Onshore LP T10S, R22E, S.L.B.&M. Well location, NBU #1022-7AT, located as shown 1977 Brass Cap 1.5' in the NE 1/4 NE 1/4 of Section 7, T10S, R22E, Above 1' High Pile of Stones, Steel Post Next S.L.B.&M. Uintah County, Utah. To Cap and Steel Post 1991 Alum. Cap S89'41'42"W Pile of Stones N89'23'01"W - 2245.49' (Meas.) 2640.65' (Meas.) BASIS OF ELEVATION 1977 Bross Cap TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 NBU #1022-7AT 0.4' Above 1.5' OF SECTION 1, TIOS, R21E, S.L.B.&M. TAKEN FROM THE BIG High Pile of 646 Elev. Ungraded Ground = 5244 Stones, Steel PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 Post MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET. 2686.08 LOT 1 BASIS OF BEARINGS BASIS OF BEARINGS IS A G.P.S. OBSERVATION. W" 12.61.00V LOT 2 1991 Alum. Cap 0.4" High, Steel Post, Mound of Stones Brass Cop LOT 3 2646.29" SCALE CERTIFICATE THIS IS TO CERTIFY THAT THE ABOVE E FIELD NOTES OF ACTUAL SURVEYS MAR SUPERVISION AND THAT THE SAME A W.80,82.00N BEST OF MY KNOWLEDGE AND BELIEF LOT 4 1991 Alum. Cap. 0.5' High, Pile 1991 Alum. of Stones Cap UINTAH ENGINEERING LAND SURVEYING S89'44'56"W - 2643.93' (Meas.) S89'44'56"W - 2203.24' (Meas.) VERNAL UTAH 84078 85 SOUTH 200 EAST 1977 Brass Cap 0.4' High, Steel Post, Pile of Stones (NAD 83) (435) 789-1017 LATITUDE = 39'58'12.07'' (39.970019) DATE DRAWN: LEGEND: SCALE DATE SURVEYED: 1" = 1000'05-29-08 06-17-08 LONGITUDE = $109^{\circ}28^{\circ}31.41^{\circ}$ (109.475392) 90° SYMBOL REFERENCES PARTY (NAD 27) LK. D.D. S.L. G.L.O. PLAT LATITUDE = 39'58'12.19'' (39.970053) PROPOSED WELL HEAD. WEATHER FILE LONGITUDE = $109^{\circ}28^{\circ}28.95^{\circ}$ (109.474708) = SECTION CORNERS LOCATED. WARM Kerr-McGee Oil & Gas Onshore LP

# NBU 1022-07AT NENE Sec. 7, T10S,R22E UINTAH COUNTY, UTAH ST ML 23609

### **ONSHORE ORDER NO. 1**

### **DRILLING PROGRAM**

### 1. <u>Estimated Tops of Important Geologic Markers:</u>

Formation	<u>Depth</u>
Uinta	0- Surface
Green River	1295
Birds Nest	1659'
Mahogany	2126'
Wasatch	4526'
Mesaverde	7103'
MVU2	7988'
MVL1	8595'
TD	9200'

## 2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	<u>Formation</u>	<u>Depth</u>	
	Green River	1295'	
Water	Birds Nest	1659'	
Water	Mahogany	2126'	
Gas	Wasatch	4526'	
Gas	Mesaverde	7103'	
Gas	MVU2	7988'	
Gas	MVL1	8595'	
Water	N/A		
Other Minerals	N/A		

### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

### 4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

### 5. <u>Drilling Fluids Program</u>:

Please refer to the attached Drilling Program.

## 6. <u>Evaluation Program</u>:

Please refer to the attached Drilling Program.

### 7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9200' TD, approximately equals 5704 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3680 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

### 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

#### 9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

#### Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

#### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

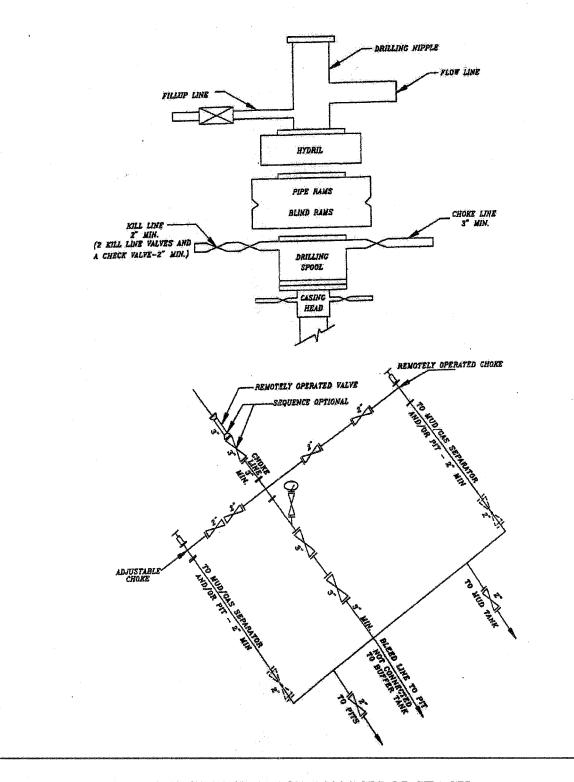
#### Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

### 10. Other Information:

Please refer to the attached Drilling Program.

# **EXHIBIT A**



# NBU 1022-07AT NENE SEC. 7, T10S, R22E UINTAH COUNTY, UTAH ST ML 23609

#### ONSHORE ORDER NO. 1

### MULTI-POINT SURFACE USE & OPERATIONS PLAN

#### 1. Existing Roads:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

#### 2. Planned Access Roads:

Approximately 0.2 mi. +/- of new access road is proposed. Please refer to the attached Topo Map B.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

#### 3. <u>Location of Existing Wells Within a 1-Mile Radius:</u>

Please refer to Topo Map C.

#### 4. <u>Location of Existing & Proposed Facilities:</u>

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain

fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 1,481' of 4" pipeline is proposed. Refer to Topo D for the proposed pipeline.

#### 5. Location and Type of Water Supply:

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

#### 6. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

#### 7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility, Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond, SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond, Sec. 2, T10S, R23E.

#### 8. Ancillary Facilities:

None are anticipated.

### 9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

#### 10. Plans for Reclamation of the Surface:

#### Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

#### Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

#### 11. <u>Surface/Mineral Ownership</u>:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

#### 12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

#### 13. Lessee's or Operators's Representative & Certification:

Kevin McIntyre Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6226 Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre

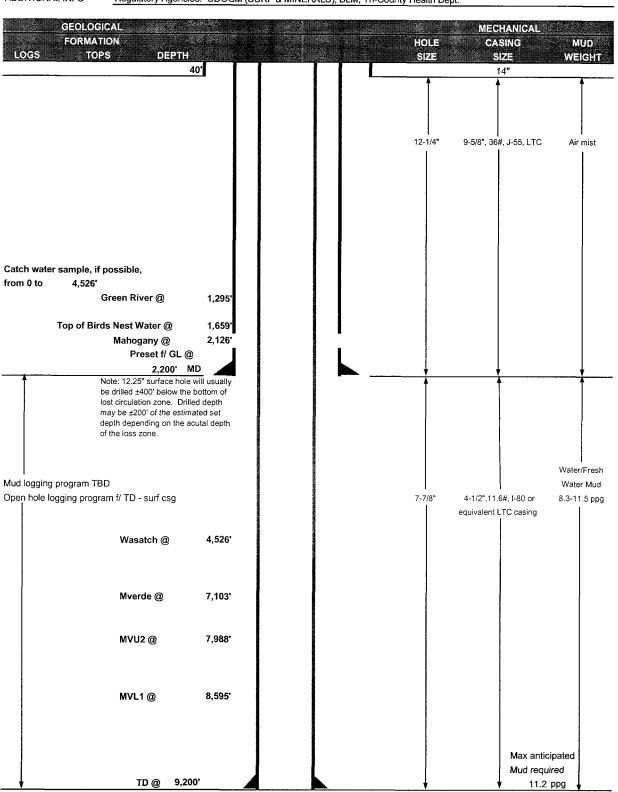
7/14/2008

Date



# KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPANY NAME	KERR-McGE	E OIL & GAS ON	SHORE LP		DATE	July 14, 2	2008				
WELL NAME	<b>NBU 1022</b>	-07AT		-	TD	9,200'	MD/TVD				
FIELD Natural Bu	ttes	_COUNTY Uinta	h S	TATE U	Jtah	ELEVATION	5,244' GL	KE	3 5,259'		
SURFACE LOCATION	NENE 25	5' FNL & 646' FE	<u>.,</u> Sec. 7, T 10	S R 22E				BHL	Straight Hole		
	Latitude:	39.970053	Longitude:	-109.4	174708		NAD 27				
OBJECTIVE ZONE(S)	Wasatch/N	/lesaverde									
ADDITIONAL INFO	Regulatory	Regulatory Agencies: UDOGM (SURF & MINERALS), BLM, Tri-County Health Dept.									







#### **CASING PROGRAM**

i								DESIGN FACTORS			
	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION		
CONDUCTOR	14"		0-40'								
		-						3520	2020	453000	
SURFACE	9-5/8"	0	to	2,200'	36.00	J-55	LTC	1.06	1.96	6.53	
								7780	6350	201000	
PRODUCTION	4-1/2"	0	to	9200	11.60	1-80	LTC	2.33	1.19	2.16	
								}			

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.2 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

MASP 3860 psi

#### **CEMENT PROGRAM**

		***************************************		n vonameno annone		Management - VM-1111111111111111111111111111111111	
		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt	100		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to surface	e, option	2 will be uti	lized	
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite	230	35%	11.00	3.82
			+.25 pps Flocele + 3% salt BWOC				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
	l		+ .25 pps flocele	1			! !
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTIO	<b>)N</b> LEAD	4,020'	Premium Lite II + 3% KCI + 0.25 pps	440	60%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel		·		
			+ 0.5% extender				
	j						
	TAIL	5,180'	50/50 Poz/G + 10% salt + 2% gel	1450	60%	14.30	1.31
			+.1% R-3			•	

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

#### **FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.							
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.							

### ADDITIONAL INFORMATION

ВО	PE: 11" 5M with one ann	ular and 2 rams. Test to	5,000 psi (annular to 2,500 psi) prior to drilling	out. Record on chart recorder &					
tou	r sheet. Function test ram	ns on each trip. Maintain	safety valve & inside BOP on rig floor at all til	mes. Kelly to be equipped with upper					
& lo	ower kelly valves.								
Dro	op Totco surveys every 20	00'. Maximum allowable	hole angle is 5 degrees.						
Мо	Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.								
LING EN	IGINEER:			DATE:					
LING EN	IGINEER:	Brad Laney		DATE:					
	NGINEER: JPERINTENDENT:	Brad Laney		DATE:					

<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

# Kerr-McGee Oil & Gas Onshore LP NBU#1022-7A4BS, #1022-7AT, #1022-7A4CS & #1022-7B2DS SECTION 7, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88: EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 3.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN **SOUTHEASTERLY** APPOXIMATELY 5.4 MILES TO THE PROPOSED ACCESS ROAD TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 53.5 MILES.



# **Drilling Services**

**Proposal** 

# Anadario Kerrit Gee

# **ANADARKO - KERR McGEE**

**NBU 1022 7AT** 

UINTAH COUNTY, UTAH

WELL FILE: PLAN 1

JULY 8, 2008

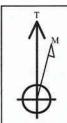
Weatherford International, Ltd.





#### ANADARKO KERR MCGEE OIL & GAS NBU NBU 1022 7AT UINTAH COUNTY, UTAH

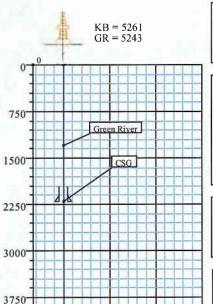




Azimuths to True North Magnetic North: 11.46°

Magnetic Field Strength: 52640nT Dip Angle: 65,92° Date: 7/8/2008 Model: bggm2007

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1 2	0.00 9200.00	0,00 0.00	0.00	0.00 9200.00	0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	PBHL 7AT



WELL DETAILS Name +N/-S+E/-WNorthing Easting Latitude Longitude Slot 2567570.15 39°58'12,190N 109°28'28,950W N/A 7AT 14.16 -14:01 602563.26

FORMATION TOP DETAILS No. TVDPath MDPath Formation

1295.00 4526.00 7103.00 1295.00 4526.00 7103.00 Green River Wasatch Mesaverde

CASING DETAILS MD No. TVD Name Size 0.00 2200.00 2200.00 CSG

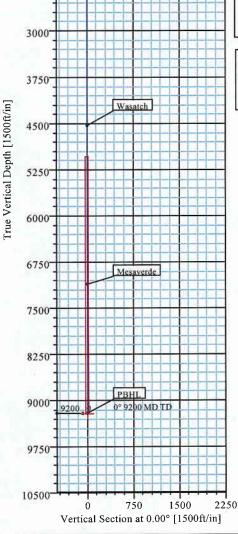
FIELD DETAILS UINTAH COUNTY, UTAH (NAD 27)

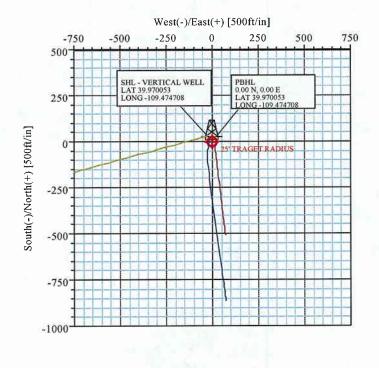
US State Plane Coordinate System 1927 NAD27 (Clarke 1866) Utah, Central Zone Geodetic System: Ellipsoid: Zone: Magnetic Model: bggm2007

System Datum: Mean Sea Level Local North: True North

LEGEND 7A4B\$ (1) 7A4C\$ (1) 7B2D\$ (1)

TARGET DETAILS TVD +N/-S +E/-W Latitude Longitude Shape 39°58'12,190N 109°28'28,950W Circle (Radius: 25) PBHL 7AT 9200.00 0.00 0.00





Plan: Plan #1 (7AT/I)

Created By: Russell Joyner

Date: 7/8/2008



# Weatherford WELL PLAN REPORT



Company: Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (NAD 27) Field: NBU 1022-7A PAD

Site: Well: 7AT

Wellpath: 1

7/8/2008

Date: Co-ordinate(NE) Reference:

Vertical (TVD) Reference:

Section (VS) Reference: Survey Calculation Method:

Well: 7AT, True North

SITE 5261.0

Time: 14:09:35

7/8/2008

Well (0.00N,0.00E,0.00Azi) Minimum Curvature

Db: Sybase

Page:

Plan: Plan #1

Yes

Date Composed: Version:

Tied-to:

From Surface

Principal: Field:

UINTAH COUNTY, UTAH (NAD 27)

Map System: US State Plane Coordinate System 1927

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Map Zone: Coordinate System: Geomagnetic Model: Utah, Central Zone Well Centre

bggm2007

Site:

Well:

NBU 1022-7A PAD

Site Position:

Geographic From:

7AT

Northing: Easting:

602549.42 ft 2567584.48 ft Latitude: Longitude:

39 58 12.050 N 28.770 W 109 28

North Reference: **Grid Convergence:**  True 1.30 deg

**Position Uncertainty:** Ground Level:

0.00 ft 5243.00 ft

Slot Name:

+N/-S+E/-W

14.16 ft Northing: -14.01 ft Easting:

602563.26 ft Latitude: 2567570.15 ft Longitude:

12.190 N 39 58 28.950 W 109 28

Surface

Position Uncertainty: 0.00 ft

Wellpath: 1

**Current Datum:** 

Magnetic Data:

Well Position:

SITE

7/8/2008

52640 nT

Field Strength: Vertical Section: Depth From (TVD) ft

0.00

+N/-S ft 0.00

Height 5261.00 ft

Tie-on Depth: **Above System Datum:** Declination:

ft

0.00

**Drilled From:** 

Mag Dip Angle: +E/-W

Mean Sea Level 11.46 deg 65.92 deg

0.00 ft

Direction deg 0.00

**Plan Section Information** 

MD	Incl	Azim	TVD	+N/-S	+E/-W	DLS	Build	Turn	TFO	Target
ft	deg	deg	ft	ft	ft	deg/100ff	t deg/100f	t deg/100ft	deg	
0.00 9200.00	0.00 0.00	0.00 0.00	0.00 9200.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	PBHL 7AT

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	HOLD
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	1
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	İ
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1295.00	0.00	0.00	1295.00	0.00	0.00	0.00	0.00	0.00	0.00	Green River
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	į
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	CSG
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	



# Weatherford WELL PLAN REPORT



Company: Anadarko-Kerr-McGee
Field: UINTAH COUNTY, UTAH (NAD 27) Field: NBU 1022-7A PAD Site:

7AT Well:

Wellpath: 1

Date: 7/8/2008

Survey Calculation Method:

Time: 14:09:35

Page:

Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference:

Well: 7AT, True North

SITE 5261.0 Well (0.00N,0.00E,0.00Azi)

Minimum Curvature Db: Sybase

S	n	m	76	4

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4526.00	0.00	0.00	4526.00	0.00	0.00	0.00	0.00	0.00	0.00	Wasatch
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	0.00	0.00	
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	0.00	
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00	0.00	0.00	0.00	
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	0.00	0.00	
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	0.00	0.00	
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00	0.00	0.00	0.00	
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00	0.00	0.00	0.00	
6800.00	0.00	0.00	6800.00	0.00	0.00	0.00	0.00	0.00	0.00	
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00	0.00	0.00	0.00	
7103.00	0.00	0.00	7103.00	0.00	0.00	0.00	0.00	0.00	0.00	Mesaverde
7200.00	0.00	0.00	7200.00	0.00	0.00	0.00	0.00	0.00	0.00	
7400.00	0.00	0.00	7400.00	0.00	0.00	0.00	0.00	0.00	0.00	
7600.00	0.00	0.00	7600.00	0.00	0.00	0.00	0.00	0.00	0.00	
7800.00	0.00	0.00	7800.00	0.00	0.00	0.00	0.00	0.00	0.00	
8000.00	0.00	0.00	8000.00	0.00	0.00	0.00	0.00	0.00	0.00	
8200.00	0.00	0.00	8200.00	0.00	0.00	0.00	0.00	0.00	0.00	
8400.00	0.00	0.00	8400.00	0.00	0.00	0.00	0.00	0.00	0.00	
8600.00	0.00	0.00	8600.00	0.00	0.00	0.00	0.00	0.00	0.00	
8800.00	0.00	0.00	8800.00	0.00	0.00	0.00	0.00	0.00	0.00	
9000.00	0.00	0.00	9000.00	0.00	0.00	0.00	0.00	0.00	0.00	
9200.00	0.00	0.00	9200.00	0.00	0.00	0.00	0.00	0.00	0.00	PBHL

Target	
--------	--

Name	Description Dip. Dir.	TVD	+N/-S	+E/-W	Map Northing	Map Easting	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec	
		***************************************	•			*********			ı

#### **Casing Points**

MD ft	TVD ft	Diameter in	Hole Size in	Name	
2200.00	2200.00	0.00	0.00	CSG	

#### Annotation

MD ft	TVD ft			-			
0.01 9200.00	0.01 9200.00	HOLD PBHL			 		



# Weatherford WELL PLAN REPORT



Company: Anadarko-Kerr-McGee

Field: **UINTAH COUNTY, UTAH (NAD 27)** Site: NBU 1022-7A PAD

Well: 7AT

Wellpath: 1

Date: 7/8/2008

Vertical (TVD) Reference:

Section (VS) Reference: Survey Calculation Method:

Time: 14:09:35 Co-ordinate(NE) Reference:

Well: 7AT, True North

SITE 5261.0 Well (0.00N,0.00E,0.00Azi)

Minimum Curvature

Db: Sybase

Page:

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1295.00	1295.00	Green River		0.00	0.00
4526.00	4526.00	Wasatch		0.00	0.00
7103.00	7103.00	Mesaverde		0.00	0.00



# Weatherford Drilling Services

GeoDec v4.3.065

Report Date:	July 08,	2008							
Job Number: Customer:	ANADARKO	)							
Well Name:	NBU 1022	2-7AT							
API Number:									
Rig Name:	<u> </u>								
Location:	UINTAH (	COUNTY, UTA	H						
Block: Engineer:	R JOYNEI	₹							
O	/ 1		01-1-1-1-1-1-1-1-1						
Geodetic Latitude	•		Geodetic Latitude / Longi						
System: Latitude / Longitude System: Latitude / Longitude  Projection: Geodetic Latitude and Longitude Projection: Geodetic Latitude and									
Datum: NAD 192		<del>-</del>	•	•					
Ellipsoid: Clarke 1	•	ONUS)	Datum: NAD 1927 (NADCON CONUS) Ellipsoid: Clarke 1866						
Latitude 39.9700			Latitude 39 58 12.19080	OO DMS					
Longitude -109.4			Longitude -109 28 28.94						
Longitude - 109.4	747000 DEG		Grid Convergence: 1.29						
			Total Correction: +10.16						
Geodetic Location	NGS84	Elevatio	n= 0.0 Meters						
	39.97005° N		58 min 12.191 sec						
Longitude = 1			28 min 28.949 sec						
Magnetic Declina	tion =	11.4650°	[True North Offset]						
Local Gravity =		.9995 g							
Local Field Streng	gth =	52640 nT	Magnetic Vector X =	21048 nT					
		65.9220°	Magnetic Vector Y =	4269 nT					
Magnetic Dip =									
Magnetic Dip =  Magnetic Model =	:	bggm2007	Magnetic Vector Z =	48060 nT					





Company: Anadarko-Kerr-McGee

**UINTAH COUNTY, UTAH (NAD 27)** Field:

Reference Site: NBU 1022-7A PAD 7AT

Reference Well: Reference Wellpath: 1 Date: 7/8/2008

Time: 14:47:44

Page:

Well: 7AT, True North

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

SITE 5261.0

Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria Interpolation Method: MD + Stations Interval: 100.00 ft Depth Range: 0.00 to 9376.38 ft

Maximum Radius: 10000.00 ft

Reference: Error Model: Scan Method: Plan: Plan #1 ISCWSA Ellipse Closest Approach 3D

Error Surface:

Plan: Plan #1 **Date Composed:** Version:

Ellipse

Yes

Tied-to:

From Surface

7/8/2008

Principal: Summary

<	Offset Wellpath		Reference	Offset	Ctr-Ctr	Edge	Separation	
Site	Well	Wellpath	MD ft	MD ft	Distance ft	Distance ft	Factor	Warning
NBU 1022-7A PAD	7A4BS	1 V0 Plan: Plan #1 V1	2300.00	2299.78	20.14	10.75	2.15	
NBU 1022-7A PAD	7A4CS	1 V0 Plan: Plan #1 V1	2500.00	2500.33	16.30	6.99	1.75	

Site: NBU 1022-7A PAD

7A4BS Well:

Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error:

0.00

ft

wenpan	i: I VU Plar	i. i ali #i v	1						Inter-Sit	C LITUE.	0.00	. IL	
Re	eference	Of	ffset	Semi-M	lajor Axis		Offset 1	Location	Ctr-Ctr	Edge	Separation		
MD	TVD	MD	TVD	Ref		TFO-HS		East			e Factor	Warning	1
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft	'		
0.00	0.00	0.00	0.00	0.00	0.00	135.31	-14.16	14.01	19.92		· · · · · · · · · · · · · · · · · · ·	No Data	
100.00		100.00	100.00	0.09		135.31	-14.16	14.01	19.92	19.75	115.99		
200.00		200.00	200.00	0.30		135.31	-14.16	14.01	19.92	19.33	33.73		
300.00		300.00	300.00	0.50		135.31	-14.16	14.01	19.92	18.91	19.73		
400.00		400.00	400.00	0.71		135.31	-14.16	14.01	19.92	18.49	13.95		+
700.00	7 400.00	400.00	400.00	0.71	0.7 .	100.01	14.10	14.01	10.02	10.10	10.00		
500.00	500.00	500.00	500.00	0.92	0.92	135.31	-14.16	14.01	19.92	18.07	10.78		İ
600.00	600.00	600.00	600.00	1.13		135.31	-14.16	14.01	19.92	17.65	8.79		
700.00	700.00	700.00	700.00	1.34	1.34	135.31	-14.16	14.01	19.92	17.23	7.42		
800.00	800.00	800.00	800.00	1.55	1.55	135.31	-14.16	14.01	19.92	16.82	6.42		
900.00	900.00	900.00	900.00	1.76	1.76	135.31	-14.16	14.01	19.92	16.40	5.65		
1000.00		1000.00	1000.00	1.97		135.31	-14.16	14.01	19.92	15.98	5.05		
1100.00		1100.00	1100.00	2.18		135.31	-14.16	14.01	19.92	15.56	4.57		
1200.00	1200.00	1200.00	1200.00	2.39		135.31	-14.16	14.01	19.92	15.14	4.17		
1300.00	1300.00	1300.00	1300.00	2.60		135.31	-14.16	14.01	19.92	14.72	3.83		
1400.00	1400.00	1400.00	1400.00	2.81	2.81	135.31	-14.16	14.01	19.92	14.30	3.55		
								4404	40.00	40.00			
1500.00		1500.00	1500.00	3.02		135.31	-14.16	14.01	19.92	13.88	3.30		
1600.00		1600.00	1600.00	3.23		135.31	-14.16	14.01	19.92	13.46	3.09		
1700.00		1700.00	1700.00	3.44		135.31	-14.16	14.01	19.92	13.05	2.90		
1800.00		1800.00	1800.00	3.65		135.31	-14.16	14.01	19.92	12.63	2.73		1
1900.00	1900.00	1900.00	1900.00	3.86	3.86	135.31	-14.16	14.01	19.92	12.21	2.58		
2000.00	2000.00	2000.00	2000.00	4.07	4.07	135.31	-14.16	14.01	19.92	11.79	2.45		
2100.00		2100.00	2100.00	4.07		135.31	-14.16	14.01	19.92	11.37	2.43		
2200.00		2200.00	2200.00	4.48		135.31	-14.16	14.01	19.92	10.95	2.22		
				4.40		135.79	-14.10	14.04	20.14	10.35	2.15		
2300.00		2299.78	2299.78 2399.07	4.69		140.58	-14.43	14.40	22.69	12.89	2.13		
2400.00	2400.00	2399.13	2399.07	4.90	4.90	140.56	-17.52	14.40	22.09	12.09	2.32		
2500.00	2500.00	2498.14	2497.87	5.11	5.11	147.72	-23.99	15.15	28.45	18.24	2.79		
2600.00		2596.59	2595.82	5.32		154.26	-33.78	16.29	37.73	27.12	3.56		
2700.00		2694.25	2692.59	5.53		159.18	-46.79	17.80	50.61	39.60	4.60		
2800.00		2790.90	2787.86	5.74		162.64	-62.88	19.66	67.00	55.60	5.88		
2900.00		2886.34	2881.36	5.95	6.06	165.05	-81.90	21.87	86.80	75.02	7.37		
		.===,	= = · · · <del>=</del>										
3000.00		2980.39	2972.82	6.16		166.76		24.40	109.90	97.74	9.04		
3100.00		3077.01	3066.36	6.37		167.98		27.19	134.82		10.71		
3200.00		3173.82	3160.09	6.58		168.83		29.98	159.79		12.27		
3300.00		3270.63	3253.81	6.79		169.44		32.78	184.78		13.73		
3400.00	3400.00	3367.45	3347.54	7.00	7.75	169.91	-199.97	35.57	209.78	195.88	15.09		
						470.00	004.00	00.07	00470	000 45	40.07		
3500.00	3500.00	3464.26	3441.26	7.21	8.14	170.28	-224.06	38.37	234.79	220.45	16.37		





Company: Field:

Date: 7/8/2008

Time: 14:47:44

Page:

Reference Site:

Anadarko-Kerr-McGee UINTAH COUNTY, UTAH (NAD 27) NBU 1022-7A PAD

Co-ordinate(NE) Reference:

Well: 7AT, True North SITE 5261.0

Reference Well: 7AT Reference Wellpath: 1

Vertical (TVD) Reference:

Db: Sybase

Site:

NBU 1022-7A PAD

Well: 7A4BS
Wellpath: 1 V0 Plan: Plan #1 V1

Well: Wellpath:	7A4BS 1 V0 Plan	: Plan #1 V	<b>′</b> 1						Inter-Sit	e Error:	0.00	ft
	rence		fset	Semi-M	lajor Axis		Offset l	Location	Ctr-Ctr	Edge Se	eparation	HAW
MD	TVD	MD .	TVD	Ref		TFO-H		East		Distance		Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		•
3600.00	3600.00	3561.07	3534.98	7.42	8 54	170.58	-248 16	41.17	259.81	245 03	17.57	J
3700.00	3700.00	3657.88	3628.71	7.63		170.83		43.96	284.84		18.70	
3800.00	3800.00	3754.69	3722.43	7.84	9.36	171.03	-296.34	46.76	309.87	294.19	19.77	
3900.00	3900.00	3851.50	3816.16	8.04	9.79	171.21	-320.43	49.55	334.90	318.78	20.77	
					40.00	474.00	044.50	50.05	050.04	0.40.00	04.774	
4000.00	4000.00	3948.31	3909.88	8.25		171.36		52.35	359.94		21.71	
4100.00 4200.00	4100.00 4200.00	4045.12	4003.60 4101.99	8.46 8.67		171.49 171.61		55.15 58.05	384.98 409.79		22.61 23.53	
4300.00	4300.00	4146.68 4256.18	4208.66	8.88		171.71		60.89	432.32		24.56	
4400.00	4400.00	4367.05	4317.35	9.09		171.80		63.41	452.03		25.59	
4500.00	4500.00	4479.13	4427.83	9.30		171.86		65.59	468.87		26.46	
4600.00	4600.00	4592.24	4539.83	9.51		171.91		67.41	482.80		27.18	
4700.00	4700.00	4706.20	4653.10	9.72		171.95		68.85	493.78		27.76	
4800.00	4800.00	4820.82	4767.34	9.93		171.97		69.91	501.79		28.19	
4900.00	4900.00	4935.88	4882.26	10.14	11.12	171.99	-301.54	70.57	506.79	408.00	28.48	
5000.00	5000.00	5051.19	4997.54	10.35	11.01	172.00	-503.82	70.84	508.78	491.01	28.62	
5100.00	5100.00	5153.65	5100.00	10.56		172.00		70.84	508.82	490.69	28.06	
5200.00	5200.00	5253.65	5200.00	10.77	11.18	172.00	-503.87	70.84	508.82		27.46	
5300.00	5300.00	5353.65	5300.00	10.98	11.31	172.00	-503.87	70.84	508.82	489.90	26.89	
5400.00	5400.00	5453.65	5400.00	11.19	11.45	172.00	-503.87	70.84	508.82	489.50	26.34	
FF00 00	oo	5550.05	5500.00	44.40	44.50	470.00	F00.07	70.04	E00.00	400.40	25.00	
5500.00	5500.00	5553.65	5500.00	11.40		172.00 172.00		70.84	508.82 508.82		25.80 25.29	
5600.00 5700.00	5600.00 5700.00	5653.65 5753.65	5600.00 5700.00	11.61 11.81		172.00		70.84 70.84	508.82		24.80	
5800.00	5800.00	5853.65	5800.00	12.02		172.00		70.84	508.82		24.32	
5900.00	5900.00	5953.65	5900.00	12.23		172.00		70.84	508.82		23.87	
6000.00	6000.00	6053.65	6000.00	12.44		172.00		70.84	508.82		23.42	
6100.00	6100.00	6153.65	6100.00	12.65		172.00		70.84	508.82		23.00	
6200.00	6200.00	6253.65	6200.00	12.86		172.00 172.00		70.84 70.84	508.82 508.82		22.58 22.19	
6300.00 6400.00	6300.00 6400.00	6353.65 6453.65	6300.00 6400.00	13.07 13.28		172.00		70.84	508.82		21.80	
0400.00	0400.00	0400.00	0400.00	10.20	12.00	112.00	000.07	70.04	000.02	100.10	21.00	
6500.00	6500.00	6553.65	6500.00	13.49	13.05	172.00	-503.87	70.84	508.82	485.08	21.43	
6600.00	6600.00	6653.65	6600,00	13.70	13.21	172.00	-503.87	70.84	508.82		21.07	
6700.00	6700.00	6753.65	6700.00	13.91		172.00		70.84	508.82		20.72	
6800.00	6800.00	6853.65	6800.00	14.12		172.00		70.84	508.82		20.38	
6900.00	6900.00	6953.65	6900.00	14.33	13.69	172.00	-503.87	70.84	508.82	483.45	20.05	
7000.00	7000.00	7053.65	7000.00	14.54	13.85	172.00	-503.87	70.84	508.82	483.04	19.74	
7100.00	7100.00	7153.65	7100.00	14.75	14.01	172.00	-503.87	70.84	508.82		19.43	
7200.00	7200.00	7253.65	7200.00	14.96	14.18	172.00	-503.87	70.84	508.82		19.13	
7300.00	7300.00	7353.65	7300.00	15.17	14.34	172.00	-503.87	70.84	508.82		18.84	
7400.00	7400.00	7453.65	7400.00	15.37	14.51	172.00	-503.87	70.84	508.82	481.41	18.56	
7500.00	7500.00	7550.05	7500.00	45.50	14.00	170.00	E02 07	70.04	500 00	<b>491 00</b>	18 20	
7500.00	7500.00	7553.65	7500.00	15.58		172.00 172.00		70.84 70.84	508.82 508.82		18.29 18.02	
7600.00 7700.00	7600.00 7700.00	7653.65 7753.65	7600.00 7700.00	15.79 16.00		172.00		70.8 <del>4</del> 70.84	508.82		17.76	
7800.00	7800.00	7853.65	7800.00	16.21		172.00		70.84	508.82		17.51	
7900.00	7900.00	7953.65	7900.00	16.42		172.00		70.84	508.82		17.27	
8000.00	8000.00	8053.65	8000.00	16.63		172.00		70.84	508.82		17.03	
8100.00	8100.00	8153.65	8100.00	16.84		172.00		70.84	508.82		16.80 16.57	
8200.00	8200.00	8253.65	8200.00	17.05 17.26		172.00 172.00		70.84 70.84	508.82 508.82		16.57 16.35	
8300.00 8400.00	8300.00 8400.00	8353.65 8453.65	8300.00 8400.00	17.26 17.47		172.00		70.8 <del>4</del> 70.84	508.82		16.14	
0700.00	J-00.00	J-00.00	Q-100.00	11.71	10.20	2.00	555.01		555.02			
8500.00	8500.00	8553.65	8500.00	17.68		172.00		70.84	508.82		15.93	
8600.00	8600.00	8653.65	8600.00	17.89	16.58	172.00	-503.87	70.84	508.82	476.47	15.73	





Company:

Anadarko-Kerr-McGee UINTAH COUNTY, UTAH (NAD 27) Field: NBU 1022-7A PAD

Reference Site: Reference Well: 7AT

Reference Wellpath: 1

Date: 7/8/2008

Time: 14:47:44

Well: 7AT, True North

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

SITE 5261.0

Db: Sybase

Page:

Site: NBU 1022-7A PAD

7A4BS Well:

We

Velipath: 1 VO Plan: Pl	ian #1 V1			Inter-Site Error	0.00	π
Reference	Offset	Semi-Major Axis	Offset Location	Ctr-Ctr Edge	Separation	

	Reference					Semi-Major Axis			ocation_	Ctr-Ctr Edge Separation				
	MD ft	TVD ft	MD ft	TVD ft	Ref	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance	Factor	Warning	
	harder of the state of the stat													
H	8700.00	8700.00	8753.65	8700.00	18.10	16.76	172.00	-503.87	70.84	508.82	476.06	15.53		
	8800.00	8800.00	8853.65	8800.00	18.31	16.94	172.00 -	503.87	70.84	508.82	475.65	15.34		
	8900.00	8900.00	8953.65	8900.00	18.52	17.12	172.00	-503.87	70.84	508.82	475.23	15.15		
	9000.00	9000.00	9053.65	9000.00	18.73	17.30	172.00 -	503.87	70.84	508.82	474.82	14.96		1
H	9100.00	9100.00	9153.65	9100.00	18.94	17. <del>4</del> 8	172.00 -	503.87	70.84	508.82	474.41	14.78		
	9200.00	9200.00	9253.65	9200.00	19.14	17.66	172.00 -	503.87	70.84	508.82	473.99	14.61		

NBU 1022-7A PAD Site: Well: 7A4CS

Wellpath: 1 V0 Plan: Plan #1 V1 Inter-Site Error: 0.00 ft

	Reference		Of	Semi-Major Axis			Offset Location		Ctr-Ctr	Edge S	Separation	1990.2 - 1011 - 1	
	MD	TVD	MD .	TVD	Ref		TFO-HS		East				Warning
	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
T	0.00	0.00	0.00	0.00	0.00	0.00	315.30	14.17	-14.02	19.93	0#-41W1-7		No Data
	100.00	100.00	100.00	100.00	0.09		315.30	14.17	-14.02	19.93	19.76	116.07	
	200.00	200.00	200.00	200.00	0.30		315.30	14.17	-14.02	19.93	19.34	33.75	
	300.00	300.00	300.00	300.00	0.50		315.30	14.17	-14.02	19.93	18.92	19.75	
İ	400.00	400.00	400.00	400.00	0.71		315.30	14.17	-14.02	19.93	18.51	13.96	
	400.00	400.00	400.00	400.00	0.71	0.71	010.00		11.02	10.00	10.01	10.00	
	500.00	500.00	500.00	500.00	0.92	0.92	315.30	14.17	-14.02	19.93	18.09	10.79	
	600.00	600.00	600.00	600.00	1.13	1.13	315.30	14.17	-14.02	19.93	17.67	8.80	
	700.00	700.00	700.00	700.00	1.34	1.34	315.30	14.17	-14.02	19.93	17.25	7.42	
	800.00	800.00	800.00	800.00	1.55	1.55	315.30	14.17	-14.02	19.93	16.83	6.42	
	900.00	900.00	900.00	900.00	1.76	1.76	315.30	14.17	-14.02	19.93	16.41	5.66	
	1000.00	1000.00	1000.00	1000.00	1.97		315.30	14.17	-14.02	19.93	15.99	5.06	
	1100.00	1100.00	1100.00	1100.00	2.18		315.30	14.17	-14.02	19.93	15.57	4.57	
	1200.00	1200.00	1200.00	1200.00	2.39		315.30	14.17	-14.02	19.93	15.15	4.17	
	1300.00	1300.00	1300.00	1300.00	2.60		315.30	14.17	-14.02	19.93	14.74	3.83	
	1400.00	1400.00	1400.00	1400.00	2.81	2.81	315.30	14.17	-14.02	19.93	14.32	3.55	
	1500.00	1500.00	1500.00	1500.00	3.02	3.02	315.30	14.17	-14.02	19.93	13.90	3.30	
	1600.00	1600.00	1600.00	1600.00	3.23		315.30	14.17	-14.02	19.93	13.48	3.09	
	1700.00	1700.00	1700.00	1700.00	3.44		315.30	14.17	-14.02	19.93	13.06	2.90	
	1800.00	1800.00	1800.00	1800.00	3.65		315.30	14.17	-14.02	19.93	12.64	2.73	
	1900.00	1900.00	1900.00	1900.00	3.86		315.30	14.17	-14.02	19.93	12.22	2.58	
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
	2000.00	2000.00	2000.00	2000.00	4.07	4.07	315.30	14.17	-14.02	19.93	11.80	2.45	
	2100.00	2100.00	2100.00	2100.00	4.27		315.30	14.17	-14.02	19.93	11.38	2.33	
	2200.00	2200.00	2200.00	2200.00	4.48		315.30	14.17	-14.02	19.93	10.97	2.22	
	2300.00	2300.00	2300.20	2300.20	4.69		314.47	13.82	-14.08	19.73	10.43	2.12	
	2400.00	2400.00	2400.53	2400.44	4.90	4.40	303.91	9.93	-14.77	17.80	8.49	1.91	
	2500.00	2500.00	2500.33	2499.89	5.11	4 20	276.24	1.77	-16.21	16.30	6.99	1.75	
	2600.00 2600.00	2600.00	2500.33 2599.57	2598.43	5.32		241.76	-9.80	-18.25	20.77	11.45	2.23	
	2700.00	2700.00	2698.82	2696.94	5.53		223.14	-9.00	-20.35	29.92	20.59	3.21	
	2800.00	2800.00	2798.07	2795.46	5.74		213.73	-33.63	-20.35	40.69	31.35	4.36	
	2900.00	2900.00	2896.38	2892.94	5.95		207.85	-46.09	-24.35	52.60	43.26	5.63	
	2500.00	2900.00	2080.30	2032.34	5.55	3.57	201.00	-40.03	-£ <del>-1</del> .00	JZ.00	-10.20	0.00	
	3000.00	3000.00	2993.06	2988.30	6.16	3.49	202.21	-61.93	-25.28	67.90	58.55	7.26	
	3100.00	3100.00	3088.29	3081.54	6.37		197.21	-81.32	-25.19	87.11	77.74	9.30	
	3200.00	3200.00	3181.79	3172.23	6.58		193.06	-103.98	-24.13	110.30	100.90	11.74	
	3300.00	3300.00	3273.30	3260.06	6.79	3.74	189.70	-129.61	-22.16	137.43		14.54	
	3400.00	3400.00	3362.61	3344.72	7.00	4.02	186.99	-157.87	-19.35	168.39	158.84	17.64	
		0.000.00	0.440 #=	0.400.0.4	7.04	4.00	404.70	400.44	45 77	202.04	402.26	20.00	
	3500.00	3500.00	3449.52	3426.01	7.21		184.79		-15.77	203.04 240.89		20.98 24.41	
	3600.00	3600.00	3537.72	3507.41	7.42		182.94		-11.40 -6.72	240.89 279.40		24.41 27.60	
	3700.00	3700.00	3629.81	3592.20	7.63		181.49 180.40		-6.72 -2.04	279.40 318.03		27.60 30.54	
L	3800.00	3800.00	3721.89	3677.00	7.84	5.95	100.40	-293.20	-2.04	310.03	307.02	30.04	1-10-00





Company: Field: Anadarko-Kerr-McGee

**UINTAH COUNTY, UTAH (NAD 27)** 

Reference Site: NBU 1022-7A PAD

Reference Well: 7AT Reference Wellpath: 1

Date: 7/8/2008 Time: 14:47:44

Co-ordinate(NE) Reference: Vertical (TVD) Reference: Well: 7AT, True North SITE 5261.0

Db: Sybase

Page:

NBU 1022-7A PAD Site:

Well: 7A4CS

Wellpath:	1 V0 Plan	: Plan #1 V	′1						Inter-Sit	e Error:	0.00	ft
Refe	rence	Of	fset	Semi-M	lajor Axis	<u> </u>	Offset L	ocation	Ctr-Ctr	Edge S	eparation	
MD	TVD	MD	TVD	Ref	Offset	TFO-H	S North	East		Distance	Factor	Warning
 ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3900.00	3900.00	3813.98	3761.80	8.04	6.55	179.54	-328.88	2.65	356.74	346.00	33.21	
4000.00	4000.00	3906.07	2046.60	0.05	7.16	170.05	264.47	7 22	205 50	204 40	25.62	
4000.00 4100.00	4000.00 4100.00	3906.07	3846.60 3931.40	8.25 8.46			-364.47 -400.07	7.33 12.01	395.50 434.31		35.63 37.82	
4200.00	4200.00	4090.24	4016.20	8.67			-435.66	16.70	473.14		39.78	
4300.00	4300.00	4182.33	4101.00	8.88			-471.26	21.38	512.00		41.57	
4400.00	4400.00	4274.41	4185.80	9.09			-506.85	26.07	550.87		43.18	
4500.00	4500.00	4366.50	4270.60	9.30			-542.45	30.75	589.76		44.65	
4600.00	4600.00	4468.11	4364.34	9.51			-581.32	35.86	628.30		45.89	
4700.00	4700.00	4580.26	4468.87	9.72			-621.60	41.16	664.45		46.83	
4800.00	4800.00	4694.92	4576.92 4688.35	9.93		176.00 175.82		46.17 50.83	697.84 728.36		47.54 48.03	
4900.00	4900.00	4811.95	4000.33	10.14	12.01	170.02	-090.07	50.65	120.30	113.18	40.03	
5000.00	5000.00	4931.21	4802.97	10.35	13.34	175.67	-727.71	55.13	755.93	740.29	48.34	
5100.00	5100.00	5052.51	4920.55	10.56		175.54		59.01	780.46	764.37	48.49	
5200.00	5200.00	5175.66	5040.82	10.77			-783.45	62.46	801.89		48.49	
5300.00	5300.00	5300.44	5163.50	10.98		175.36		65.43	820.14		48.35	
5400.00	5400.00	5426.62	5288.24	11.19	15.01	175.29	-824.85	67.91	835.16	817.79	48.10	
5500.00	5500.00	5553.93	5414.66	11.40	15 28	175.24	-839 68	69.86	846.89	829 15	47.73	
5600.00	5600.00	5682.11	5542.38	11.61		175.21		71.27	855.30		47.25	
5700.00	5700.00	5810.87	5670.97	11.81		175.19		72.12	860.36		46.66	
5800.00	5800.00	5939.92	5800.00	12.02			-859.00	72.40	862.04		46.08	
5900.00	5900.00	6039.92	5900.00	12.23		175.18		72.40	862.04	843.08	45.47	
6000.00	6000.00	6139.92	6000.00	12.44		175.18		72.40	862.04		44.72	
6100.00	6100.00	6239.92	6100.00	12.65		175.18		72.40	862.04		43.98	
6200.00	6200.00	6339.92	6200.00 6300.00	12.86 13.07		175.18 175.18		72.40 72.40	862.04 862.04		43.26 42.55	
6300.00 6400.00	6300.00 6400.00	6439.92 6539.92	6400.00	13.07		175.18		72.40	862.04		41.86	
0400.00	0400.00	0000.02	0400.00	13.20	10.00	170.10	-000.00	12.40	002.04	0-1110	41.00	
6500.00	6500.00	6639.92	6500.00	13.49	16.05	175.18	-859.00	72.40	862.04	841.11	41.19	
6600.00	6600.00	6739.92	6600.00	13.70	16.12	175.18	-859.00	72.40	862.04		40.52	
6700.00	6700.00	6839.92	6700.00	13.91			-859.00	72.40	862.04		39.88	
6800.00	6800.00	6939.92	6800.00	14.12		175.18		72.40	862.04		39.24	
6900.00	6900.00	7039.92	6900.00	14.33	16.31	175.18	-859.00	72.40	862.04	839.73	38.62	
7000.00	7000.00	7139.92	7000.00	14.54	16.38	175.18	-859.00	72.40	862.04	839.37	38.02	
7100.00	7100.00	7239.92	7100.00	14.75		175.18		72.40	862.04		37.43	
7200.00	7200.00	7339.92	7200.00	14.96		175.18		72.40	862.04		36.85	
7300.00	7300.00	7439.92	7300.00	15.17			-859.00	72.40	862.04		36.29	
7400.00	7400.00	7539.92	7400.00	15.37	16.68	175.18	-859.00	72.40	862.04	837.93	35.74	
7500.00	7500.00	7639.92	7500.00	15.58	16 76	175 12	-859.00	72.40	862.04	837 56	35.21	
7500.00 7600.00	7500.00 7600.00	7739.92	7600.00	15.56			-859.00	72.40	862.04		34.68	
7700.00	7700.00	7839.92	7700.00	16.00			-859.00	72.40	862.04		34.17	
7800.00	7800.00	7939.92	7800.00	16.21		175.18		72.40	862.04		33.67	
7900.00	7900.00	8039.92	7900.00	16.42		175.18		72.40	862.04		33.19	
	0000 55	0400.00	0000 00	40.00	4= 00	475.40	050.00	70.40	000.04	005.00	22.74	
8000.00	8000.00	8139.92	8000.00	16.63			-859.00	72.40 72.40	862.04 862.04		32.71 32.25	
8100.00 8200.00	8100.00 8200.00	8239.92 8339.92	8100.00 8200.00	16.84 17.05			-859.00 -859.00	72.40 72.40	862.04 862.04		32.25 31.80	
8200.00	8300.00	8439.92	8300.00	17.05	17.40	175.18	-859.00	72.40 72.40	862.04		31.36	
8400.00	8400.00	8539.92	8400.00	17.47			-859.00	72.40	862.04		30.93	
8500.00	8500.00	8639.92	8500.00	17.68			-859.00	72.40	862.04		30.51	
8600.00	8600.00	8739.92	8600.00	17.89	17.80	1/5.18	-859.00	72.40	862.04		30.10	
8700.00	8700.00	8839.92	8700.00	18.10			-859.00 -859.00	72.40 72.40	862.04 862.04		29.70 29.31	
8800.00 8900.00	8800.00 8900.00	8939.92 9039.92	8800.00 8900.00	18.31 18.52			-859.00 -859.00	72.40 72.40	862.04		28.92	
 0300.00	0000.00	3003.32		10.02	10.12	170.10		,				





Company:

Anadarko-Kerr-McGee UINTAH COUNTY, UTAH (NAD 27)

Field:

NBU 1022-7A PAD

Reference Site: Reference Well: 7AT Reference Wellpath: 1

Date: 7/8/2008

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Time: 14:47:44

Well: 7AT, True North

SITE 5261.0

Db: Sybase

Page:

Site:

NBU 1022-7A PAD

Well: 7A4CS Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error

0.00

Refe	erence	Of	fset	Semi-M	lajor Axis	is Offset Location			Ctr-Ctr Edge Separation			
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft	Factor	Warning
9000.00	9000.00	9139.92	9000.00	18.73	18.23	175.18 -	859.00	72.40	862.04	831.85	28.55	
9100.00 9200.00	9100.00 9200.00	9239.92 9339.92	9100.00 9200.00	18.9 <del>4</del> 19.14			859.00 859.00	72.40 72.40	862.04 862.04		28.19 27.83	

# Kerr-McGee Oil & Gas Onshore LP NBU #1022-7A4BS, #1022-7AT,

#1022-7A4CS & #1022-7B2DS LOCATED IN UINTAH COUNTY, UTAH **SECTION 7, T10S, R22E, S.L.B.&M.** 



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHERLY



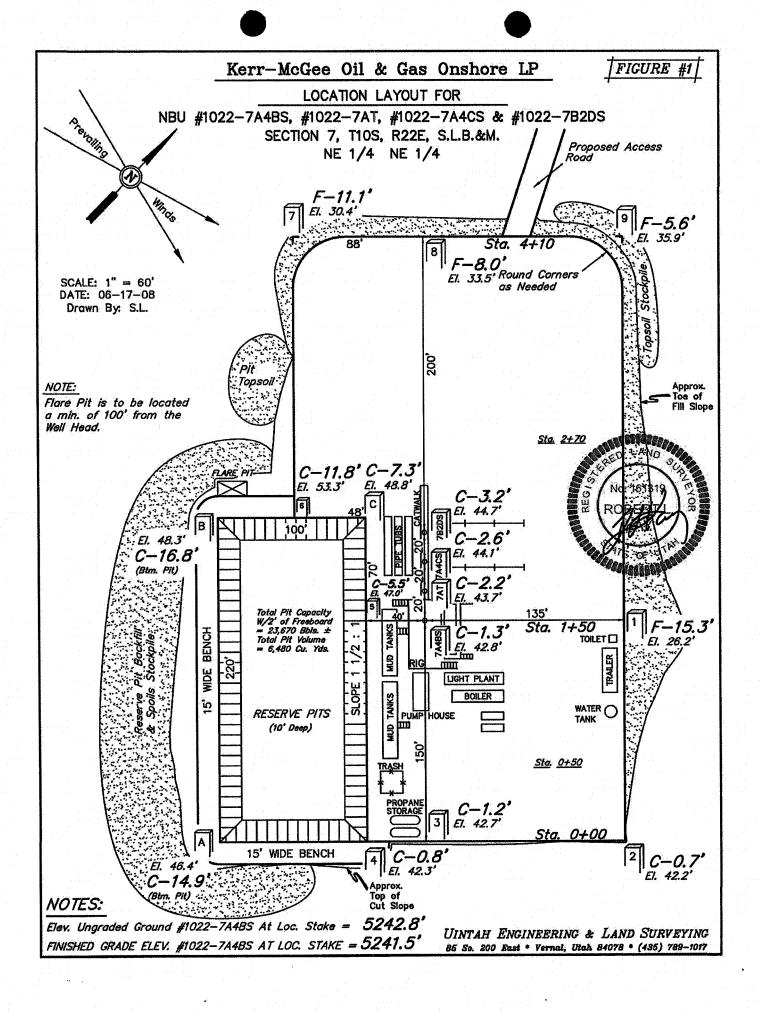
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017

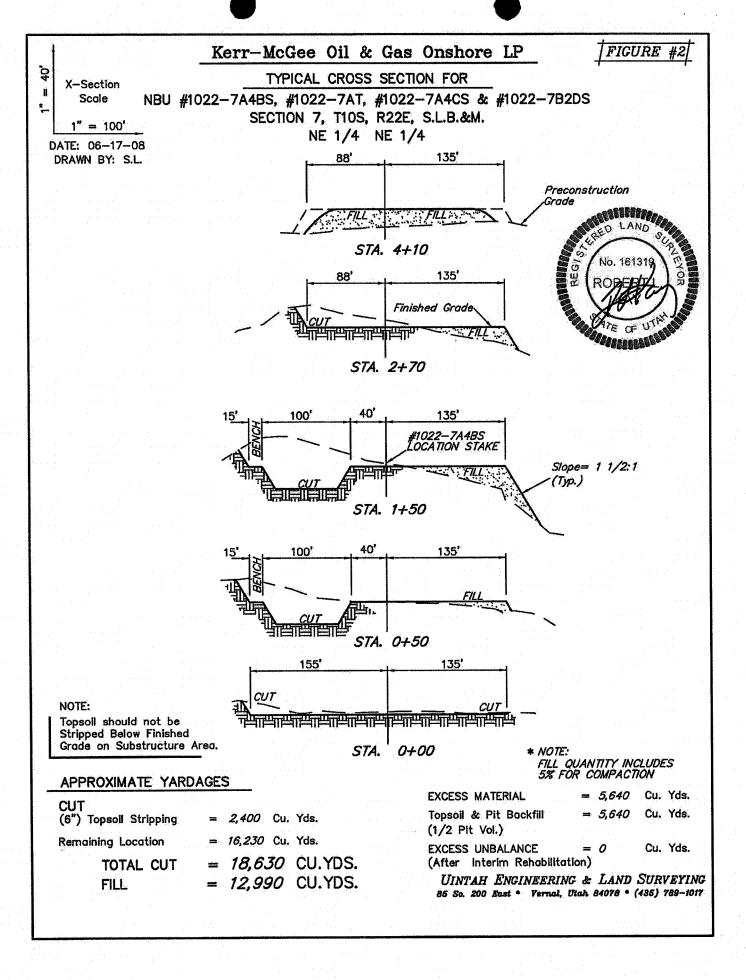
LOCATION PHOTOS

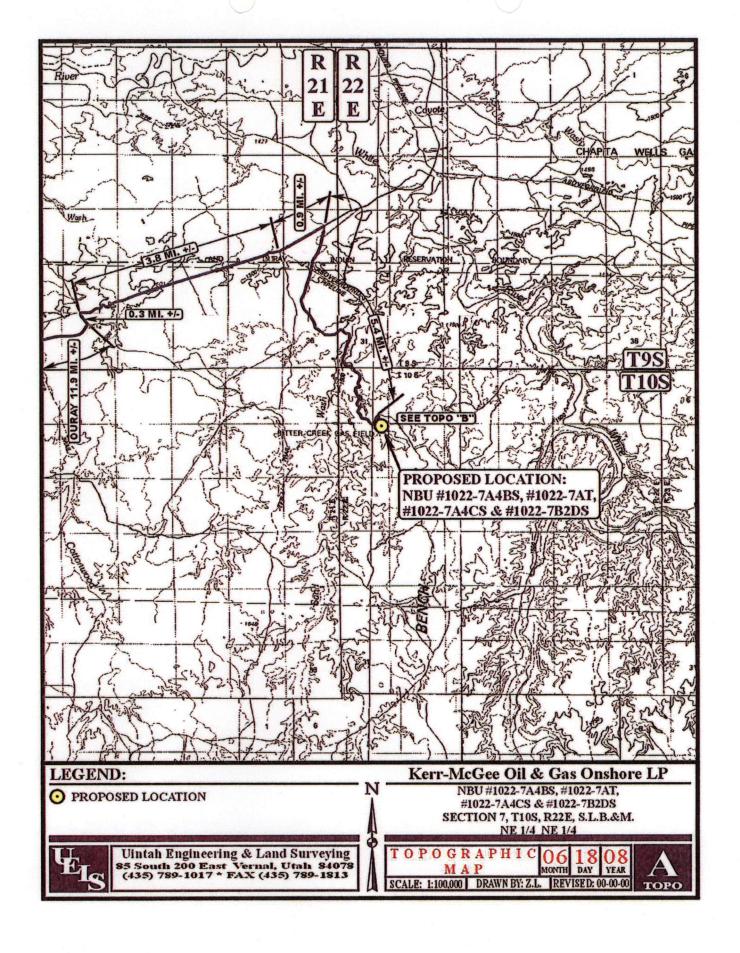
MONTH DAY

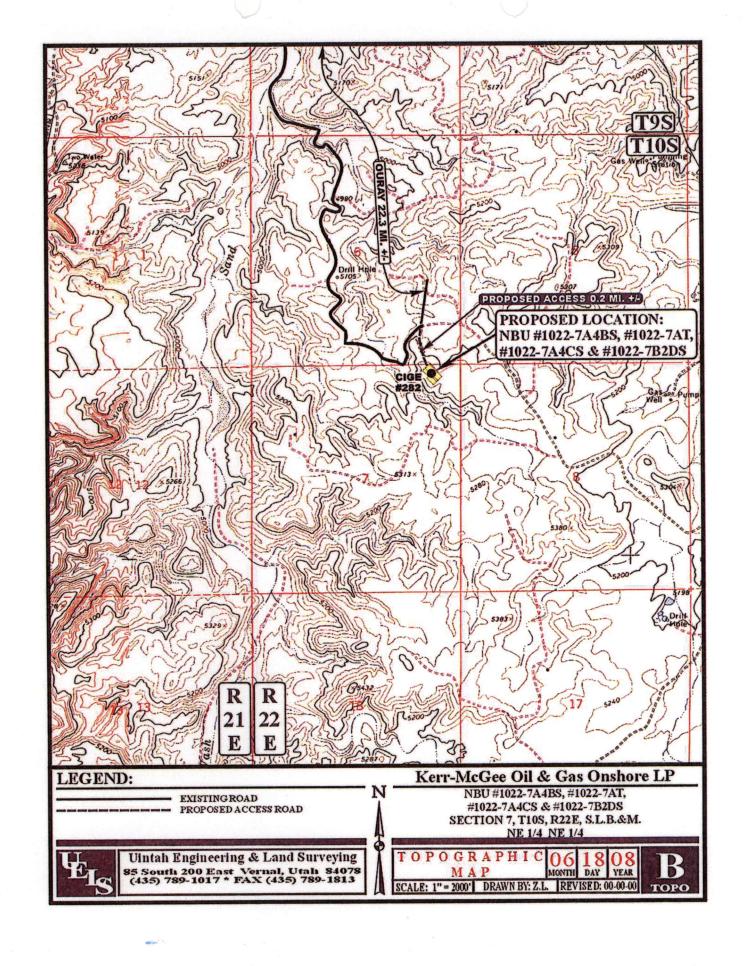
РНОТО

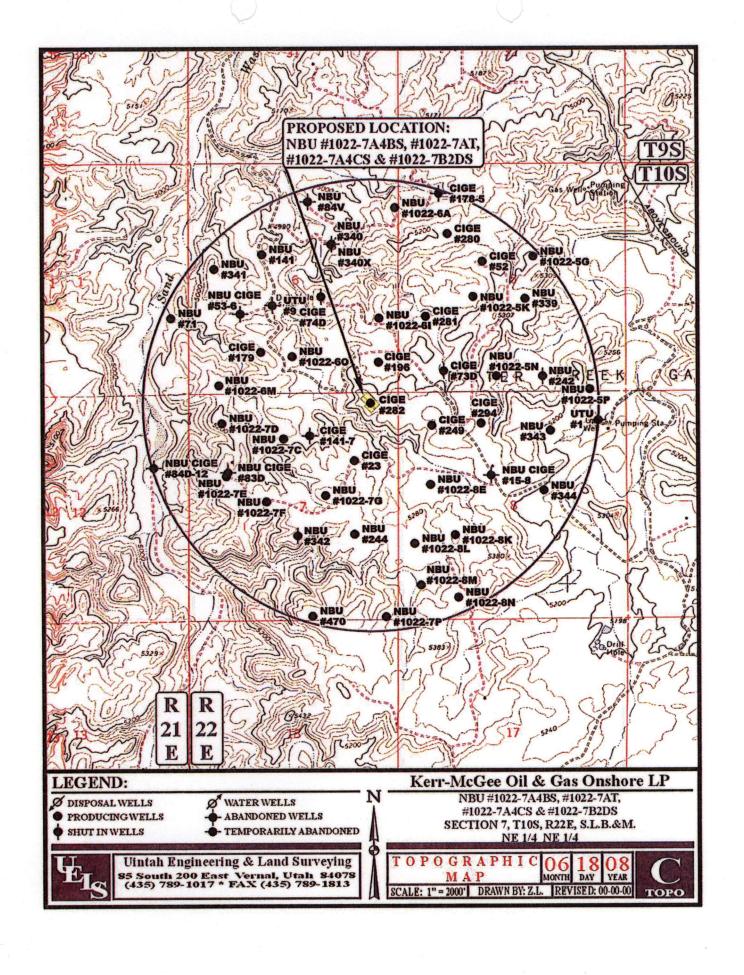
TAKEN BY: L.K. DRAWN BY: Z.L. REVISED: 00-00-00

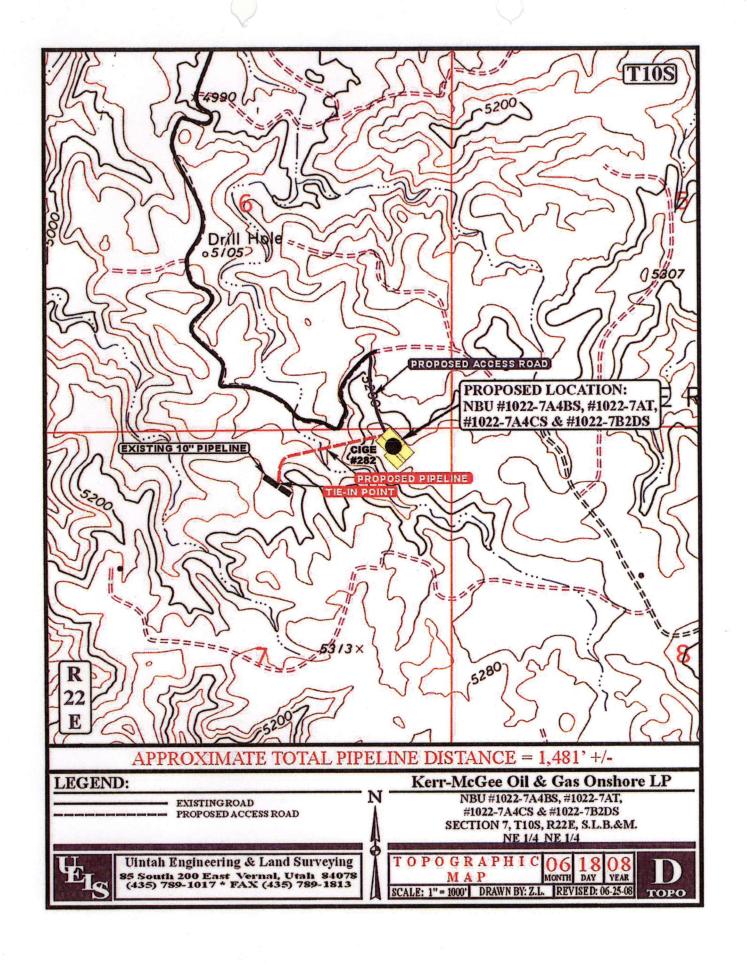


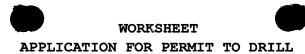




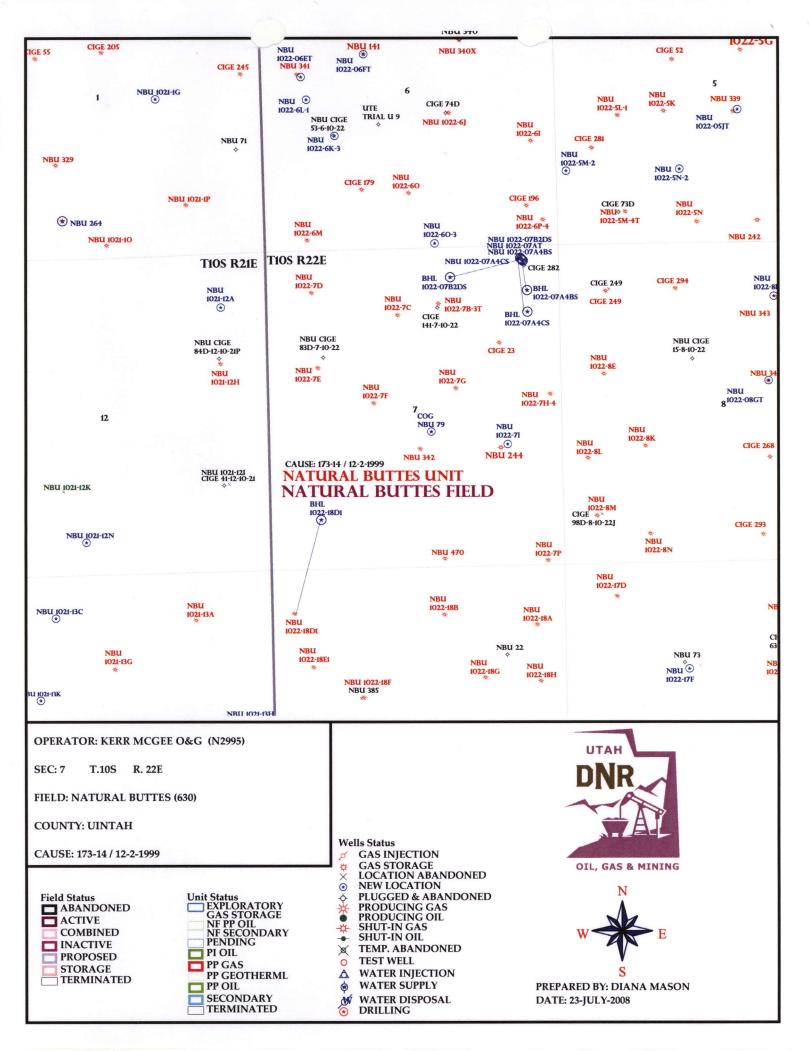








APD RECEIVED: 07/22/2008		API NO. ASSIG	NED: 43-04	7-40248				
WELL NAME: NBU 1022-07AT  OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  CONTACT: KEVIN MCINTYRE		PHONE NUMBER: 720-929-6226						
PROPOSED LOCATION:		INSPECT LOCATN	BY: /	/				
NENE 07 100S 220E		Tech Review	Initials	Date				
SURFACE: 0255 FNL 0646 FEL BOTTOM: 0255 FNL 0646 FEL		Engineering	DKO	9/30/08				
COUNTY: UINTAH		Geology		1/20/08				
LATITUDE: 39.97003 LONGITUDE: -109.4747  UTM SURF EASTINGS: 630264 NORTHINGS: 44253	335	Surface						
FIELD NAME: NATURAL BUTTES ( 630								
LEASE TYPE: 3 - State  LEASE NUMBER: ST ML 23609  SURFACE OWNER: 3 - State		PROPOSED FORMAT		IVD				
Plat  Bond: Fed[] Ind[] Sta[] Fee[]  (No. 21613542 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. 43-8496 )  RDCC Review (Y/N)  (Date: )  MM Fee Surf Agreement (Y/N)  MM Intent to Commingle (Y/N)	R Unit: R S R D	ON AND SITING: .649-2-3.  NATURAL BUTTES .649-3-2. Gener .649-3-3. Excep .649-3-3. Excep .61ling Unit .649-3-11. Dire	tion   1734   12-2-19	4 99 omm. Tract				
	LENT &	6-18-08) F BASIS Cont Stip						



# **Application for Permit to Drill**

**Statement of Basis** 

8/20/2008

## Utah Division of Oil, Gas and Mining

Page 1

APD No

**Operator** 

API WellNo

Status

Well Type GW

**Surf Ownr** S

**CBM** No

912

43-047-40248-00-00

KERR-MCGEE OIL & GAS ONSHORE, L.P. Surface Owner-APD

Well Name NBU 1022-07AT

Unit

NATURAL BUTTES

**Field** 

NATURAL BUTTES

Type of Work

Location

NENE 7 10S 22E S 255 FNL 646 FEL GPS Coord (UTM) 630264E 4425335N

#### **Geologic Statement of Basis**

Kerr McGee proposes to set 2,200' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,700'. A search of Division of Water Rights records shows 1 water well within a 10,000 foot radius of the proposed location. This well is over a mile from the proposed location and owned by the BLM. The well is listed as being 1,850 feet deep and used for stock watering. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill

8/20/2008

**APD Evaluator** 

Date / Time

#### **Surface Statement of Basis**

This location is in the middle Sand Wash area of the Natural Buttes Unit approximately 22.3 road miles southeast of Ouray, Ut.. The Seep Ridge Road, Uintah County roads and existing or planned oil field development roads to within 0.2 mile of the site, which will require re-construction, accesses it.

Sand Wash drains northerly to the White River a distance of approximately 7 miles. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws. Sand Wash is an ephemeral drainage. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. The washes are sometimes rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

Four gas wells are proposed on this pad. The pad has been recently re-contoured and re-claimed from a previous well. Excavation will begin near the top of a ridge on the south with the fill moved northeasterly down slope to construct the pad. No drainages intersect the location and no diversions will be required. The reserve pit will be re-dug in the area used for the previous location. The selected site has no apparent concerns for constructing a pad, drilling and operating the planned wells and is the best location in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Ben Williams of the Utah Division of Wildlife Resources was invited the pre-site visit and did not attend

Floyd Bartlett

6/18/2008

**Onsite Evaluator** 

Date / Time

# **Application for Permit to Drill Statement of Basis**

8/20/2008

## Utah Division of Oil, Gas and Mining

Page 2

## Conditions of Approval / Application for Permit to Drill

Category

Condition

Pits

A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be

properly installed and maintained in the reserve pit.

Surface

The reserve pit shall be fenced upon completion of drilling operations.

## Utah Division of Oil, Gas and Mining

Operator

KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Well Name** 

NBU 1022-07AT

API Number

43-047-40248-0

**APD No** 912

Field/Unit NATURAL BUTTES

Location: 1/4,1/4 NENE

Sec 7

Tw 10S

Rng 22E 255 FNL 646 FEL

GPS Coord (UTM)

**Surface Owner** 

### **Participants**

Floyd Bartlett and David Hackford (DOGM), Jim Davis (SITLA), Raleen White, Kevin McIntyre and Tony Kzneck (Kerr McGee) and David Kay (Uintah Engineering and Land Surveying).

## Regional/Local Setting & Topography

This location is in the middle Sand Wash area of the Natural Buttes Unit approximately 22.3 road miles southeast of Ouray, Ut.. The Seep Ridge Road, Uintah County roads and existing or planned oil field development roads to within 0.2 mile of the site, which will require re-construction, accesses it.

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Four gas wells are proposed on this pad. The pad has been recently re-contoured and re-claimed from a previous well. Excavation will begin near the top of a ridge on the south with the fill moved northeasterly down slope to construct the pad. No drainages intersect the location and no diversions will be required. The reserve pit will be re-dug in the area used for the previous location. The selected site has no apparent concerns for constructing a pad, drilling and operating the planned wells and is the best location in the immediate area.

Both the surface and minerals are owned by SITLA.

### Surface Use Plan

**Current Surface Use** 

Grazing

Recreational

Wildlfe Habitat

**Existing Well Pad** 

**New Road** 

Miles Well Pad

**Src Const Material** 

**Surface Formation** 

0.2

Width 290

Length 350

Onsite

**UNTA** 

Ancillary Facilities N

## Waste Management Plan Adequate?

#### **Environmental Parameters**

Affected Floodplains and/or Wetland N

#### Flora / Fauna

Vegetation has not re-established on the site except for cheatgrass and halogeton.

Cattle, antelope and small mammals and birds.

Soil	<b>Type</b>	and	Chara	cteristics
------	-------------	-----	-------	------------

Soils are a shallow rocky sandy loam..

**Erosion Issues** N

**Sedimentation Issues N** 

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

**Erosion Sedimentation Control Required?** N

Paleo Survey Run?

Paleo Potental Observed?

**Cultural Survey Run?** 

**Cultural Resources?** 

## Reserve Pit

Site-Specific Factors		Site 1	Ranking	
Distance to Groundwater (feet)	>200		0	
Distance to Surface Water (feet)	>1000		0	
Dist. Nearest Municipal Well (ft)	>5280		0	
Distance to Other Wells (feet)	<300		20	
Native Soil Type	Mod permeability		10	
Fluid Type	Fresh Water		5	
<b>Drill Cuttings</b>	Normal Rock		0	
Annual Precipitation (inches)	<10		0	
Affected Populations	<10		0	
Presence Nearby Utility Conduits	Not Present		0	
		Final Score	35	Sensitivity Level

## Characteristics / Requirements

The reserve pit is planned in an area of cut in the southwest corner of the location. Dimensions are 100' x 220' x 10' deep with 2' of freeboard. A liner with a minimum thickness of 16 mils. and a felt sub-liner are required.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16

Pit Underlayment Required? Y

## Other Observations / Comments

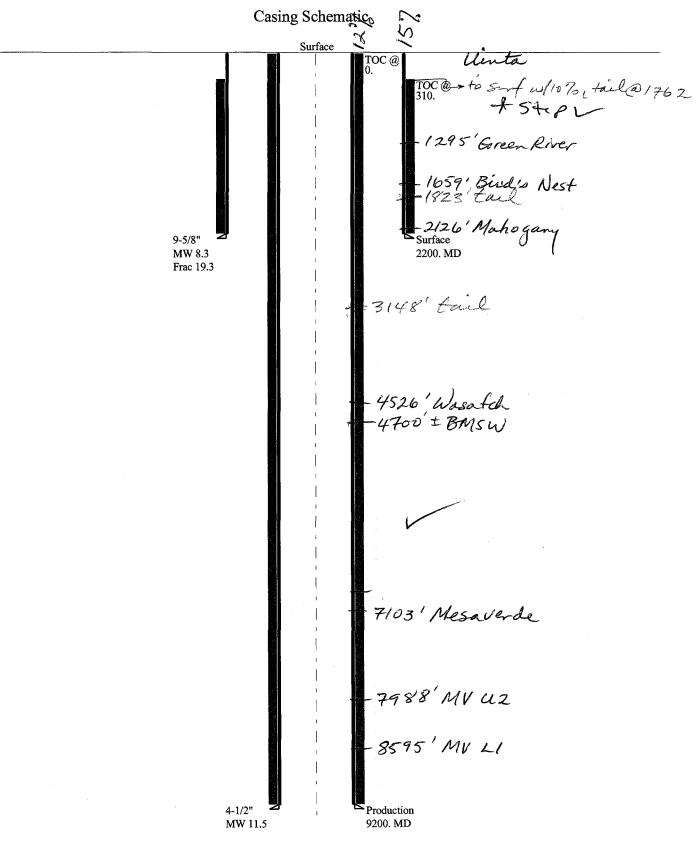
Floyd Bartlett

6/18/2008

**Evaluator** 

Date / Time

## 43047402480000 NBU 1022-07AT



Well name:

43047402480000 NBU 1022-07AT

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Surface

Project ID:

43-047-40248-0000

Location:

Uintah County, Utah

Design parameters:

Collapse

Mud weight:

8.330 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125 **Environment:** 

H2S considered? Surface temperature: No 75 °F

Bottom hole temperature: 106 °F Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,300 ft

**Burst:** 

Design factor

1.00

Cement top:

310 ft

**Burst** 

Max anticipated surface

pressure:

1,936 psi

Internal gradient: Calculated BHP

0.120 psi/ft 2,200 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: Buttress:

Premium:

1.50 (J) Body yield: 1.50 (B)

1.80 (J)

1.80 (J) 1.60 (J)

Tension is based on buoyed weight.

Neutral point: 1,929 ft Re subsequent strings:

Completion type is subs

Non-directional string.

Next setting depth: Next mud weight:

9,200 ft 11.500 ppg 5,496 psi

Next setting BHP: Fracture mud wt: Fracture depth: Injection pressure:

19.250 ppg 2,200 ft 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)	
1	2200	9.625	36.00	J-55	LT&C	2200	2200	8.796	954.9	
Run Seq	Collapse Load (psi) 952	Collapse Strength (psi) 2020	Collapse Design Factor 2.122	Burst Load (psi) 2200	Burst Strength (psi) 3520	Burst Design Factor 1.60	Tension Load (Kips) 69	Tension Strength (Kips) 453	Tension Design Factor 6.52 J	

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Minerals

Phone: (801) 538-5357 FAX: (801) 359-3940

Date: September 22,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43047402480000 NBU 1022-07AT

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Production

Project ID:

43-047-40248-0000

Location:

Collapse

Uintah County, Utah

Minimum design factors:

Collapse:

**Environment:** 

H2S considered?

No

Mud weight: 11.500 ppg Internal fluid density: 2.300 ppg 1.125

Surface temperature:

75 °F

Bottom hole temperature: Temperature gradient:

Completion type is subs Non-directional string. 204 °F 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

Design factor

1.00

Cement top:

Surface

**Burst** 

Max anticipated surface

No backup mud specified.

pressure:

Design parameters:

3,472 psi

Internal gradient: Calculated BHP

0.220 psi/ft

5,496 psi

8 Round STC:

Premium:

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Tension:

1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:** 1.50 (J)

Neutral point: 7,618 ft

Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft³)
1	9200	4.5	11.60	I-80	LT&C	9200	9200	3.875	802.9
Run Seq	Collapse Load	Collapse Strength	Collapse Design	Burst Load	Burst Strength	Burst Design	Tension Load	Tension Strength	Tension Design
1	<b>(psi)</b> 4397	( <b>psi</b> ) 6360	<b>Factor</b> 1.446	<b>(psi)</b> 5496	<b>(psi)</b> 7780	Factor 1.42	<b>(Kips)</b> 88	( <b>Kips</b> ) 212	<b>Factor</b> 2.40 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Minerals by:

Phone: (801) 538-5357 FAX: (801) 359-3940

Date: September 22,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9200 ft, a mud weight of 11.5 ppg. An internal gradient of .119 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

## **BOPE REVIEW**

## Kerr-McGee NBU 1022-07AT API 43-047-40248-0000

INPUT				
Well Name	Kerr-McGee NBU 102	2-07AT API 43-04	7-40248-0000	
	String 1	String 2		
Casing Size (")	9 5/8	4 1/2		
Setting Depth (TVD)	2200	9200		
Previous Shoe Setting Depth (TVD)	40	2200		
Max Mud Weight (ppg)	8.4	11.5	6	
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3520	7780		. 1
Operators Max Anticipated Pressure (psi)	5704	11.9	opg &	

Calculations	String 1	9 5/8 "		
Max BHP [psi]	.052*Setting Depth*MW =	961		
		E	OPE Adequ	ate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	697	NO	Diff. Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	477	YES	
		*	Can Full Ex	pected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	486	NO	Keasonable Dooth in area - no expected on
Required Casing/BOPE Te	st Pressure	220 <del>0</del> p		
*Max Pressure Allowed @	Previous Casing Shoe =	( 40 p	si >	*Assumes 1psi/ft frac gradient
				<del></del>

Calculations	String 2	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	5502	·
31-11-31-11-31-11-31-31-31-31-31-31-31-3		BOP	E Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	4398	YES 1
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3478	YES
		*Can	Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	3962	NO (Leasonab)
Required Casing/BOPE Test	Pressure	5000 psi	
*Max Pressure Allowed @ P	revious Casing Shoe =	2200 psi	*Assumes 1psi/ft frac gradient

## **United States Department of the Interior**

# BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

July 24, 2008

#### Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Natural Buttes Unit Uintah

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ Wasatch/MesaVerde)

43-047-40248 NBU 1022-07AT Sec 07 T10S R22E 0255 FNL 0646 FEL 43-047-40249 NBU 1022-07B2DS Sec 07 T10S R22E 0226 FNL 0674 FEL

BHL Sec 07 T10S R22E 0531 FNL 1838 FEL

43-047-40250 NBU 1022-07A4BS Sec 07 T10S R22E 0270 FNL 0632 FEL BHL Sec 07 T10S R22E 0760 FNL 0575 FEL

43-047-40251 NBU 1022-07A4CS Sec 07 T10S R22E 0241 FNL 0660 FEL BHL Sec 07 T10S R22E 1116 FNL 0574 FEL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit

Division of Oil Gas and Mining

Central Files Agr. Sec. Chron

## **STATE OF UTAH**

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

F	Ä	RI	M	2
г	v	N	VΙ	J

AMENDED REPORT (highlight changes)

UT Form 3 APD Updated UDOGM 2-2008 xls.xls Utah APD Form 3

		APPLIC/	TION FOR PE	RMIT TO DRIL	.L	5. MINERAL LEASE NO: 6. SURFACE ST ML 23609 State	E:
1A. TYPE OF WO	ŘK:	DRILL X	REENTER	DEEPEN	The second secon	7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WEL	L: ÖIL		OTHER	SINGLE ZONE	MULTIPLE ZONE X	8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPER	RATOR:	Sas Onshore			<u>, — — — — — — — — — — — — — — — — — — —</u>	9. WELL NAME and NUMBER:  NBU 1022-07AT	
3. ADDRESS OF C		oas Onshore	, <b>-</b>		PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:	
P.O. Box 1	173779	Denver	Colorado	80217-3779 STATE ZIP	720-929-6226	Natural Buttes Field	
4. LOCATION OF	WELL (FOOTAG		,			11. QTR/QTR, SECTION, TOWNSHIP, RANGE MERIDIAN:	,
AT SURFACE	E: ED PRODUĆIN			9.970053 LON -109	9.474708 (NAD 27)	NENE Sec. 7	Е
AT FROPOS	ED PRODUCIN	G ZONE. 1477			tar on administrative and the second	7 10 5 - K 22	
14. DISTANCE IN 22.5 miles so			REST TOWN OR POST OF	FICE:		12. COUNTY: 13. STATE UINTAH UTAH	
15. DISTANCE TO	NEAREST PRO	OPERTY OR LEASE L	INE (FEET)	16. NUMBER OF ACRE	S IN LÉASÉ:	17. NUMBER OF ACRES ASSIGNED TO THIS WEL	 L:
255'					294.22		40
18. DISTANCE TO APPLIED FOR)		LL (DRILLING, COMP	LETED, OR	19. PROPOSED DEPTH	<del>1</del> :	20. BOND DESCRIPTION:	
500'	, 011 11110 122 10	- (··/		9200' MD		RLB0005237	
21. ELEVATIONS	(SHOW WHETH	IER DF, RT, GR, ETC	.):	22. APPROXIMATE DA	TE WORK WILL START:	23. ESTIMATED DURATION:	
5244' GR				ASAP		10 days	
24.			PROPOS	SED CASING AND (	CEMENTING PROGRAM		
SIZE OF HOLE	CASING	SIZE, GRADE, AND	WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE	, QUANTITY, YIELD, AND SLURRY WEIGHT	
12 1/4"	9 5/8" J	-55 36#		2200'	Premium Cement 215	sx 1.18 15.6	
					Premium Cement 100	0 sx 1.18 15.6	
7 7/8"	4 1/2" I	-80 11.6#		9200'	Premium Lite II 440	0 sx 3.38 11.0	
					50/50 Poz G 145	50 sx 1.31 14.3	
				,			
25.				ATTACHM	IENTS		•
VERIFY THE FOLI	LOWING ARE A	TTACHED IN ACCOR	DANCÉ WITH THE UTAH	OIL AND GAS CONSERVA	TION GENERAL RULES:		
X WELL PLAT	OR MAP PREI	PARED BY LICENSED	SURVEYOR OR ENGINE	EER X	COMPLETE DRILLING PLAN		
X EVIDENCE	OE DIVISION C	NE WATER RIGHTS A	PPROVAL FOR USE OF V	NATER	T FORM 5 JE OPERATOR IS PER	RSON OR COMPANY OTHER THAN THE LEASE OW	/NER
X EVIDENCE	Of Biviolotte	WATERRIOMOA	THO VALLE ON BOLL OF			CON ON COMINATION OF THE COMIN	
NAME (PLEASE P	PRINT) Ke	evin McIntyre	e e , e e e		TITLE Regulatory Analy	rst I	
SIGNATURE _	/-	- mes		<del></del>	DATE July 14, 2008	and the second s	
(This space for Sta	te use only)	<del>anaki e sisa sa 1.1 s</del>	<u> </u>		oved by the Division of	A State of the second s	
					s and Mining	DEALTH	
		:/~	. 11.0110			RECEIVED	
API NUMBER	R ASSIGNED:	4 3-00	17-40248	Data: 1 AP	PROVAL:	JUL 2 5 2008	
				Date: 10	1991		
(11/2001)				Bir (	X L N VX ) L V /	DIV. OF OIL, GAS & MINING	

From:

Jim Davis

To:

DIANAWHITNEY@utah.gov,EDBONNER@utah.gov,LAVONNEGARRISON@utah.g

ov

Date: Subject: 11/11/2008 10:21 AM

Well aprovals 11/11/08

The following wells have been approved by SITLA including paleo and arch clearance.

4304740248 NBU 1022-07AT Kerr-McGee Oil & Gas Natural Buttes NENE 07 100S 220E S UINTAH

4304740249 NBU 1022-07B2DS Kerr-McGee Oil & Gas Natural Buttes NENE 07 100S 220E S UINTAH

4304740250 NBU 1022-07A4BS Kerr-McGee Oil & Gas Natural Buttes NENE 07 100S 220E S

UINTAH

4304740251 NBU 1022-07A4CS Kerr-McGee Oil & Gas Natural Buttes NENE 07 100S 220E S UINTAH

4304739954 NBU 1022-02F Kerr McGee Natural Buttes SENW 02 100S 220E S UINTAH 4304739955 NBU 1022-02D Kerr McGee Natural Buttes NWNW 02 100S 220E S UINTAH 4304739959 NBU 1022-13H Kerr McGee Natural Buttes SENE 13 100S 220E S UINTAH

-Jim

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov Phone: (801) 538-5156



Lieutenant Governor

## State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

November 18, 2008

Kerr-McGee Oil & Gas Onshore, LP P O Box 173779 Denver, CO 80217-3779

Re: NBU

NBU 1022-07AT Well, 255' FNL, 646' FEL, NE NE, Sec. 7, T. 10 South, R. 22 East,

Uintah County, Utah

## Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40248.

Sincerely,

Gil Hunt

**Associate Director** 

pab Enclosures

cc:

**Uintah County Assessor** 

Bureau of Land Management, Vernal Field Office

**SITLA** 



Operator: Well Name & Number		<u> ⁄IcGee Oil &amp; Gas Onshore</u> 1022-07AT	,
API Number:		7-40248	
Lease:		L 23609	
Location: NE NE	Sec. 7	<b>T.</b> 10 South	<b>R.</b> 22 East

## **Conditions of Approval**

## 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

## 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home

Carol Daniels at: (801) 538-5284 office
Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water

completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-047-40248 November 18, 2008

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
- 7. Surface casing shall be cemented to the surface.

## DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Cor	mpany:l	KERR-McGEE (	OIL & GAS O	NSHORE, L.P.	
Well Name	:	NBU 102	2-07AT	·	
Api No:	43-047-4	0248	Lease Typ	oe: STATE	<u></u>
Section 07	_Township_	10S Range	<b>22E</b> Cou	inty <u>UINTAH</u>	
Drilling Cor	ntractor	PETE MAR	TIN DRLG	RIG# BUCKET	
SPUDDE	D:				
	Date	01/22/2009			
	Time	10:00 AM			
	How	DRY			
Drilling wi	ill Comme	ence:		<u> </u>	
Reported by		JAMES	GOBLE		
Telephone#		(435) 8	28-7024		
Date	01/26/2009	Signed	CHD		

### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

## **ENTITY ACTION FORM**

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

1368 SOUTH 1200 EAST

city VERNAL

state UT

zip 84078

Phone Number: (435) 781-7024

Well 1

API Number	Well N	vame	QQ	Sec	Twp.	Rng	County
4304740249	NBU 1022-07B2DS		NENE 7 10S		22E	UINTAH	
Action Code	Current Entity Number	New Entity Number	s	Spud Date		Entity Assignment Effective Date	
B	99999	2900	1	/22/200	9	]	129/09

SPUD WELL LOCATION ON 01/22/2009 AT 1400 HRS

Well 2

API Number	Well	Name	QQ	Sec	Twp	Rng	County		
4304740251	NBU 1022-07A4CS	NENE	7 108		22E UINTAH				
Action Code Current Entity New Entity Number Number		New Entity Number	s	Spud Date			Entity Assignment Effective Date		
В	99999	2900	1	/22/200	9	17	39/09		

Well 3

API Number	Well	Name	QQ	Sec	Twp	Rng	County	
4304740248	NBU 1022-07AT	NENE	108	22E	UINTAH			
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date		
В	99999	2900	1	/22/200	9	1/	39/09	

#### **ACTION CODES:**

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

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**JAN 2 6 2009** 

SHEILA UPCHEGO

Title

Signature **REGULATORY ANALYST** 

1/23/2009

Date

(5/2000)

## STATE OF UTAH

	DEPARTMENT OF NATURAL RESOUF DIVISION OF OIL, GAS AND MII		ST	ASE DESIGNATION AND SERIAL NUMBER:
SUNDRY	NOTICES AND REPORTS	ON WELLS		INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill ne drill horizontal lat	ew wells, significantly deepen existing wells below curr terals. Use APPLICATION FOR PERMIT TO DRILL fo	ent bottom-hole depth, reente orm for such proposals.	r plugged wells, or to	IIT or CA AGREEMENT NAME: IIT #891008900A
1. TYPE OF WELL OIL WELL	r-1 r-21	· · · · · · · · · · · · · · · · · · ·	8. WE	ELL NAME and NUMBER:
2. NAME OF OPERATOR: KERR McGEE OIL & GAS	ONSHODE LD		l l	NUMBER:
3. ADDRESS OF OPERATOR:			NUMBER: 10. F	IELD AND POOL, OR WILDCAT:
1368 SOUTH 1200 EAST  4. LOCATION OF WELL	VERNAL STATE UT ZIP	84078 (435	5) 781-7024 NA	ATURAL BUTTES
FOOTAGES AT SURFACE: 255'FN	IL, 646'FEL		COUM	vity: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN: NENE 7 10S 2	2E	STAT	E: UTAH
11. CHECK APPR	ROPRIATE BOXES TO INDICAT	E NATURE OF N	OTICE, REPORT, C	OR OTHER DATA
TYPE OF SUBMISSION			F ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT		SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION		TEMPORARILY ABANDON  TURING REDAIR
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANG PLUG AND ABANDO	<u></u>	TUBING REPAIR  VENT OR FLARE
SUBSEQUENT REPORT	CHANGE TUBING  CHANGE WELL NAME	PLUG BACK		WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (STAF	RT/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF V		OTHER: WELL SPUD
	CONVERT WELL TYPE		FERENT FORMATION	J OTHER. VYLLE OF OD
MIRU PETE MARTIN BUC J-55 SURFACE CSG. LEA	OMPLETED OPERATIONS. Clearly show all p CKET RIG. DRILLED 20" COND AD CMT W/28 SX READY MIX. ON 01/22/2009 AT 1000 HRS		·	6#
NAME (PLEASE PRINT)	PCHEGO	TITLE RE	EGULATORY ANAL	YST
SIGNATURE M	h mally		23/2009	
(This space for State use only)				

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JAN 26 2009

#### STATE OF UTAH

Date of work completion:  COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	OTHER: SET SURFACE CSG
COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	✓ OTHER: <u>SET SURFACE CSG</u>
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumed to the complete of the complete	0'. RAN 9 5/8" 36# J-55 NS TO PIT 50 PSI LIFT ELD. 2ND TOP OUT
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume of the property of the prope	0'. RAN 9 5/8" 36# J-55 NS TO PIT 50 PSI LIFT ELD. 2ND TOP OUT
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumed to the complete of the complete	0'. RAN 9 5/8" 36# J-55 NS TO PIT 50 PSI LIFT ELD. 2ND TOP OUT ASS G @15.8 PPG
MIRU PROPETRO AIR RIG ON 02/06/2009. DRILLED 12 1/4" SURFACE HOLE TO 2240 SURFACE CSG. CMT W/350 SX PREM CLASS G @15.8 PPG 1.15 YIELD. NO RETURN LAND PLUG FLOATS HELD. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIE W/200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. 3RD TOP OUT W/125 SX PREM CLASS TYPELD. DOWN BACKSIDE GOOD CMT TO SURFACE HOLE STAYED FULL.  WORT.  **NAME (PLEASE PRINT)** SHEILA UPCHEGO**  TITLE REGULATORY	0'. RAN 9 5/8" 36# J-55 NS TO PIT 50 PSI LIFT ELD. 2ND TOP OUT ASS G @15.8 PPG
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumed to the complete of the complete	0'. RAN 9 5/8" 36# J-55 NS TO PIT 50 PSI LIFT ELD. 2ND TOP OUT ASS G @15.8 PPG

(This space for State use only)

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FEB 1 2 2009

	CTATE OF UTALL		FORM 9
	STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCE  DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 23609
SUNDR	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for propos bottom-hole depth, reenter plu DRILL form for such proposals.	existing wells below current se APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-07AT		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI		<b>9. API NUMBER:</b> 43047402480000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th St	treet, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6587 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0255 FNL 0646 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI	P, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S	3	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
FINISHED DRILLIN 11.6# I-80 PRODUCT 3.48 YIELD. TAILEI DROP PLUG AND DIS PLUG @2886 PSI THROUGH OUT JOB & TO SURFACE NO CMT PACKOFF @5000 PS	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE □ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION  MPLETED OPERATIONS. Clearly show all perilog FROM 2240' TO 9260' ON 0 ION CSG. LEAD CMT W/360 SD CMT W/1350 SX 50/50 POZ SPLACE W/142.7 BBLS FRESH FLOATS HELD W/1.5 BBL RETO DISPLACEMENT 12.7 BBL FREST BACK TO SURFAC.E L/OUT LAST SIGN RIG 139 ON 05/17/2005 POSIGN RIG 139 P	S/16/2009. RAN 4 1/2"  X PREM LITE II @10.7 PPA @14.3 PPG 1.31 YIELD. L WATER @2250 PSI BUNDAL URNS GOOD RETURES PACE ESH WATER SPACER BACK ANDING JT SET & LOCK IN ENT CLEAN SHALE TANK.	Sccepted by the  Jtah Division of  , Gas and Mining  RECORD ONLY
NAME (PLEASE PRINT)	PHONE NUMBER		
Sheila Upchego SIGNATURE	435 781-7024	Regulatory Analyst  DATE  F(10,100,000)	
N/A		5/19/2009	

			FORM 9	
	STATE OF UTAH		FORM 9	
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 23609	
SUNDF	RY NOTICES AND REPORTS OF	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 1022-07AT		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI		<b>9. API NUMBER:</b> 43047402480000		
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0255 FNL 0646 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NENE Section: 07	<b>P, RANGE, MERIDIAN:</b> Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH	
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
☐ NOTICE OF INTENT	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME	
Approximate date work will start:	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	New construction	
Date of Work Completion:		PLUG AND ABANDON	PLUG BACK	
	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:				
	☐ TUBING REPAIR	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	
✓ DRILLING REPORT		VENT OR FLARE	WATER DISPOSAL	
Report Date: 8/19/2009		SI TA STATUS EXTENSION	APD EXTENSION	
0,13,2003	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
THE SUBJECT WELL \	MPLETED OPERATIONS. Clearly show all pertinent WAS PLACED ON PRODUCTION OF THE ATTACHED CHRONOLOGY.	N 08/18/2009 AT 2:00 GICAL WELL HISTORY. <b>A</b> U	·	
NAME (PLEASE PRINT) Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	TITLE Regulatory Analyst		
SIGNATURE N/A		<b>DATE</b> 8/18/2009		

		16						
Marie N. N. D. I. 400	0 7AT (	SLUEY		Spirid Co	nducto-			Spud Date: 2/6/2009
Well: NBU 102 Project: UTAH				Spud Co Site: NBL			<u></u>	Rig Name No: ENSIGN 139/139, PROPETRO/
		1		Start Date			1	End Date: 5/17/2009
Event: DRILLIN Active Datum:		257 01 <del>f</del> f (c	hove Mea				/E/7/0/NE	NE/6/PM/N/255.00/E/0/646.00/0/0
Level)	itito @s	7,257.0 Ht (a	ibove ivica	l Oea	0111.07	10/0/22/	/ [ / / / / / / / / / / / / / / / / / /	
546							7(0)	NO Econ Consultan
2/6/2009		- 12:00	3.50	DRLSUR	02	and Construction	P	MOVE IN AND RIG UP AIR RIG SPUD WELL @
1 2.5.255								0830 HR 2/6/09 DA 360'
		- 0:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD NO WATER 1020'
2/7/2009		- 12:00	12.00	DRLSUR	02		Р	RIG DRILLING AHEAD NO WATER 1430' DA
	12:00	- 0:00	12.00	DRLSUR	02		Р	RIG DRILLING AHEAD HIT TRONA WATER @ 1650' CIRCULATING WITH PROPETRO CEMENT NO RETURNS 1840'
2/8/2009	0:00	- 12:00	12.00	DRLSUR	02		Р	RIG DRILLING AHEAD CIRCULAING W/ PROPETRO CEMENT DA 2040'
	12:00	- 0:00	12.00	DRLSUR	02		Р	RIG DRILLING AHEAD CIRCULATING WITH PROPETRO CEMENT NO RETURNS 2150'
2/9/2009		- 12:00	12.00	DRLSUR	02		P	RIG T/D $@$ 2240' CONDITION HOLE 1 HR RUN SURVEY .25 DEG.
		- 15:00	3.00	DRLSUR	06		P	TRIP DP OUT OF HOLE
		- 18:00	3.00	DRLSUR	12		P -	RUN 2202' OF 9 5/8 CSG AND RIG DOWN AIR RIG
	18:00	- 19:00	1.00	DRLSUR	12		Р	CEMENT 1ST STAGE WITH 350 SKS TAIL @ 15.8# 1.15 5.0 GAL/SK NO RETURNS TO PIT 50 PSI LIFT LAND PLUG FLOATS HELD
	19:00	- 19:30	0.50	DRLSUR	12		Р	1ST TOP JOB 100 SKS DOWN BS WOC
		- 21:30	2.00	DRLSUR	12		Р	2ND TOP JOB 200 SKS DOWN BS WOC
		- 23:30	2.00	DRLSUR	12		Р	3RD TOP JOB 125 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
		- 23:30	0.00	DRLSUR		_	_	NO VISIBLE LEAKS PIT 50% FULL WORT
5/9/2009		- 13:00	7.00	DRLPRO	01	C	Р	R/D - SKID RIG - R/U
		- 15:00 - 17:00	2.00	DRLPRO	08	Α	Р	WORK ON POWER SHUTE ON IRON DERRICK HAND - C/0 PINS & ADJUSTED WHERE IT WOULD OPEN SO FAR. & TOPDRIVE OPEN ALL INSPECTION PLATES CHECK ALL LOOKS GOOD RUN DRIVE AT SEVERAL SPEEDS LESS NOISE AT 60 RPM THEN 40 RPM. INSTALL NEW BLOCK DOLLY
		- 17:00 - 19:00	2.00	DRLPRO DRLPRO	08 14	Δ	P P	NIPPLE UP B.O.P'S & FLARE LINES
		- 19:00 - 0:00	2.00 5.00	DRLPRO	14 15	A A	P	TEST B.O.P'S & TEST BLIND & PIPE RAMS -2"-4"
			5.50	DILLI NO	10	.,	•	VALUES - HCR & TOPDRIVE - CHOKE MAINFOLD 250 LOW 5000 HIGH - HYDRIL 250 LOW 2500 HIGH & CASING 1500.
5/10/2009		- 1:00	1.00	DRLPRO	15	Α	P	CONT. & FINSH TESTING
		- 2:00	1.00	DRLPRO	14	В	P -	SET WEAR BUSHING & HOOK UP LINE
		- 4:30	2.50	DRLPRO	09	A	P	SLIP DRILL LINE & C/O SAVER SUB & RECAL. CROWN MATIC
		- 6:30 - 7:00	2.00	DRLPRO	06 07	A	P	P/U BIT MOTOR - DIR TOOLS & SCRIBED TOOLS
		- 7:00 - 10:30	0.50 3.50	DRLPRO DRLPRO	07 06	B A	P P	LEVEL DERRICK RUN THREE 3 STAND HWDP OUT OF DERRICK &
								P/U 21 JTS OFF RACK THAT HAD BEEN HARDBANNED - T.I.H TO 2118 TAG CEMENT
		- 11:30 - 0:00	1.00	DRLPRO	02 02	F B	P P	DRILL CEMENT & F.E DRILL F/ 2253 T0 3400 - 1147- @ 91.76 FPH - 8.4
	11.30	- 0:00	12.50	DRLPRO	UZ	Þ	۲	PPG MUD WT - RPM 45 - MRPM 76 - GPM 546 - TORQ 5/3 - WOB 12/15
5/11/2009	0:00	- 12:00	12.00	DRLPRO	02	В	Р	DRILL F/ 3400 TO 4665 - 1265' @ 105.4 FPH W/ 8.5 MUD WT - RPM 45 MRPM 76 - GPM 546 - TORQ 4/7 - WOB 12/15 -
	12:00	- 12:30	0.50	DRLPRO	07	Α	Р	SER RIG
L					· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·

8/18/2009 3:56:01PM

Well: NBU 102	2-7AT (BLUE)		Spud Co	nductor	1/22/20	009	Spud Date: 2/6/2009
Project: UTAH-	UINTAH		Site: NBI	1022-7	7A PAD		Rig Name No: ENSIGN 139/139, PROPETRO/
Event: DRILLIN	NG		Start Dat	e: 2/6/20	009		End Date: 5/17/2009
Active Datum:	RKB @5,257.01ft (a	bove Mea	n Sea	UWI: 0	/10/S/22	2/E/7/0/N	NENE/6/PM/N/255.00/E/0/646.00/0/0
Level)		A Law Star Star of Star of Star		also selestas trocketo	Company (California)	2 Assembly Serve	
Case	Ten Stants at		Rese		25.0		ND/From Solvation
	12:30 - 0:00	11.50	DRLPRO	02	В	Р	DRILL F/ 4665 TO 5693 - 1028 @ 89.3 FPH W/ 8.5 MUD WT RPM 45 - MRPM 76 - GPM 546 - TORQ 4/7 - WOB 12/15.
5/12/2009	0:00 - 13:30	13.50	DRLPRO	02	В	Р	DRILL F/ 5693 TO 6474 - 781' @ 57.8 FPH W/ 8.6 MUD WT- RPM 45 - MRPM 76 - TORQ 5/8 WOB 14/17
	13:30 - 14:00	0.50	DRLPRO	07	Α	Р	SER RIG
	14:00 - 0:00	10.00	DRLPRO	02	В	Р	DRILL F/ 6474 TO 6825 - 351' @ 35.1 FPH W/ 9.2
							MUD WT - RPM 45 - MRPM 76 - TORQ 5/8 - WOB 14/18
5/13/2009	0:00 - 10:30	10.50	DRLPRO	02	В	P	DRILL F/6825' TO 7289' (464' @ 44.6fph) MW 10.3, VIS 40, WOB 18, RPM 45, MM 76, TQ 5/7, GPM 544 - ( START MUD UP @ 7200')
	10:30 - 11:00	0.50	DRLPRO	07	Α	Р	RIG SER
	11:00 - 0:00	13.00	DRLPRO	02	В	Р	DRILL F/7289' TO 7791' (502' @ 38.6fph) MW 10.6, VIS 43, RPM 45, MM 76, TQ 6/7, GPM 544
5/14/2009	0:00 - 11:00	11.00	DRLPRO	02	В	Р	DRILL F/7791' TO 8284' (493' @ 44.8fph) MW 10.7, VIS 42, WOB 16/18, RPM 45, MM 76, TQ 6/8, GPM 544, SPP 2850/2725 - SLIDE 7832-7844, WOB 9, MM RPM 76, DIFF PSI 135
	11:00 - 11:30	0.50	DRLPRO	07	Α	Р	RIG SER
	11:30 - 0:00	12.50	DRLPRO	02	В	Р	DRILL F/8284' TO 8718' ( 434'@ 34.7fph) MW 10.8, VIS 42, WOB 16/18, RPM 45, MM RPM 76, TQ 6/8, GPM 544, SPP 2850/2700 - SLIDE 8375'-8381' WOB 9, MM RPM 76, DIFF 180 (RAISE MW TO 10.9 @ 8700', BG 250/890, CONN 1520/3410 - NO FLARE - MUD CUT F/10.7 TO 10.4)
5/15/200 <del>9</del>	0:00 - 3:30	3.50	DRLPRO	02	В	Р	DRILL F/8718' TO 8807' (89' @ 25.4fph) MW 10.9, VIS 43, WOB 18, RPM 45, MM RPM 76, TQ 7/9, GPM 544, SPP 2875/2750
	3:30 - 4:00	0.50	DRLPRO	06	Н	Р	BIT QUIT DRILLING @ 8700' - OBSERVED PSI LOSS AS WOB INCREASED - PERFORMED FUNCTION TEST OF MM - POSSIBLE MM FAILURE
	4:00 - 11:30	7.50	DRLPRO	06	Н	P	BUILD & PUMP SLUG, POOH F/MM FAILURE - RACK BACK DIRECTIONAL TOOLS - BRK & L/DN BIT & MM (CHECKED MM ON SURFACE DETERMINED MM STATOR WEAK OR SHAFT BROKE - DISSASEMBLY REQUIRED FOR EXACT DETERMINATION)
	11:30 - 14:30	3.00	DRLPRO	06	Α	Р	P/UP BIT #2 & SDI 6.5" MM 1.25 deg, .14 RPG - RIH TO 2127' - FILL DRILL STRING (DIRECTIONAL TOOLS NOT IN HOLE)
	14:30 - 17:30	3.00	DRLPRO	09	Α	₽	SLIP & CUT D/LINE
	17:30 - 21:30	4.00	DRLPRO	06	Α	Р	RIH DP TO 8717' (NO PROBLEMS ON TRIP IN HOLE)
	21:30 - 22:00	0.50	DRLPRO	03	E	P -	WASH F/8717' TO 8807' - NO FILL
	22:00 - 0:00	2.00	DRLPRO	02	В	P	DRILL F/8807' TO 8900' ( 93' @ 46.5fph)
5/16/2009	0:00 - 6:00	6.00	DRLPRO	02	В	Р	DRILL F/8900' TO 9260' ( 360' @ 60fph) MW 10.9, VIS 43, WOB 18, RPM 45, MM RPM 76, TQ 6/8, GPM 544,
	6:00 - 8:00	2.00	DRLPRO	05	Α	Р	CIRC BTTMS UP PRIOR TO POOH F/LOGS
	8:00 - 15:30	7.50	DRLPRO	06	Α	P	POOH F/OPEN HOLE LOGS
	15:30 - 16:00	0.50	DRLPRO	14	В	Р	RETRIEVE WEARBUSHING
	16:00 - 21:30	5.50	DRLPRO	11	D	Р	HPJSM, R/UP HALLIBURTON WIRELINE TOOLS & EQUIPMENT, RUN TRIPLE COMBO TO LOGGERS TD @ 9181'
	21:30 - 22:00	0.50	DRLPRO	12	Α	Р	R/UP KIMZEY CASING TOOLS

							4.05	
					200	See All Section		
Well: NBU 102	2-7AT (E	BLUE)		Spud Co	nductor	: 1/22/20	009	Spud Date: 2/6/2009
Project: UTAH-	UINTAH	l		Site: NBI	U 1022-	7A PAD		Rig Name No: ENSIGN 139/139, PROPETRO/
Event: DRILLING Start		Start Dat	e: 2/6/2009			End Date: 5/17/2009		
Active Datum: I Level)	RKB @5	,257.01ft (a	bove Mea	n Sea	UWI: 0	/10/S/22	2/E/7/0/I	NENE/6/PM/N/255.00/E/0/646.00/0/0
( Per	St			(Tricks)				MD Frem Operation
	22:00	- 0:00	2.00	DRLPRO	12	С	Р	RUN 219 JTS & 1 MARKER JT 4.5" 11.60 I-80 PROD CASING - 21 CENTRALIZERS - AUTO FILL FLOAT & SHOE SET CASING @ 9251.40'
5/17/2009	0:00	- 4:00	4.00	CSG	12	С	Р	RAN 219 JTS & 1 MARKER JT $\overline{4}$ .5" 11.60 I-80 PROD CASING - 21 CENTRALIZERS - AUTO FILL FLOAT & SHOE TO 9187'
	4:00	- 5:00	1.00	CSG	03	E	Р	WASH F/9187' TO 9229'
	5:00	- 6:00	1.00	CSG	12	С	Р	P/UP M/UP HANGER ASSY AND LAND CASING @ 9251'
	6:00	- 7:30	1.50	CSG	05	Α	Р	CIRC OUT GAS - 2121 UNITS, 25' FLARE, MW 10.9 CUT 10.5
	7:30	- 10:30	3.00	CSG	12	E	P	HPJSM - R/UP HALLIBURTON CEMENT HEAD & LINE - TEST LINES TO 5592 PSI, CEMENT 4.5" I-80 11.60 PROD CASING @ 5291' W/20 BBLS WATER SPACER, LEAD 360 SKS 10.7 PPG 3.48 YIELD, TAIL 1350 SKS 14.3 PPG 1.25 YIELD, DROPPED PLUG & DISPLACED W/142.7 BBLS FRESH WATER @ 2250 PSI, BUMPED PLUG @ 2886 PSI, FLOATS HELD W/1.5 BBL RETURNS - GOOD RETURNS THROUGH OUT CEMENT JOB & DISPLACEMENT - 12.7 BBLS FRESH WATER SPACER BACK TO SURFACE - NO CEMENT BACK TO SURFACE
	10:30	- 12:30	2.00	CSG	12	С	Р	L/OUT LANDING JT - SET & LOCK IN PACKOFF - TEST PACKOFF @ 5000 PSI 15 MIN
	12:30	- 15:00	2.50	CSG	14	A	Р	N/DN BOP EQUIPMENT - TRANSFER 700 BBLS MUD TO PREMIX & UPRIGHT TANK - CLEAN SHALE TANK - RELEASE RIG @ 15:00 HRS 5/17/09, RESERVE PIT 1/2 FULL, VISUAL INSPECT PIT LINER NO LEAKS OK

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		16			effe, in			ry Reside
Vell: NBU 102		<del></del>				7. 1/22/20	009	Spud Date: 2/6/2009
roject: UTAH		<b>-</b>		Site: NB				Rig Name No: MILES-GRAY 1/1
vent: COMPL ctive Datum:		- 057 04 <del>8</del> /	haya Maa	Start Da	1		/E/7/0/NE	End Date: NE/6/PM/N/255.00/E/0/646.00/0/0
evel)	KVD @	5,257.0111 (a	above ivical	ii S <del>c</del> a	OVVI. C	1013122	/L///O/INL	NE/O/F W// W/233.00/ E/0/040.00/0/0
Cue	40.00	CONTRACTOR OF THE PARTY OF THE					700	MO From Spenifico .
8/7/2009		- 9:30	2.50	COMP	33	С	P	HOOK UP B&C QUICK TEST. BTM STEM PKG
								LEAKING AT 7000 PSI THEN QUIT LEAKING. TOP VALVE TEST GOOD. TEST TO 7200 PSI.
								REPLACE STEM PKG. RETEST VALVE AND CSG
						_		TO 7200 PSI. GOOD.
	9:30	- 11:30	2.00	COMP	37	В		MIRU SCHLUMBERGER EWL. RIH W/ 3-3/8" EXP GUN (23 GRAM, .36' HOLE, 3 SPF ON 120* AND 4
								SPF ON 90* PHASING)
								PERF STG #1- 9070-74' (4 SPF), 8990-93' (3 SPF) 8935-38' (3 SPF), 8889-92' (3 SPF). SHUT WELL I
8/10/2009	7:00	- 7:30	0.50	COMP	48		Р	HSM. FRAC & WL SAFTY.
	7:30	- 19:30	12.00	COMP	36	В	Р	OPEN WELL 1672 PSI.
								STG 1) BEG PUMP, BRK @ 3769 PSI @ 6.3 BPM. SD ISIP 2450 PSI, FG.70. BEG FRAC, PUMP
								46,296# 30/50 & TAIL IN W/ 5,000# 20/40 TLC. SI
								ISIP 2650#, FG .73. SWI, X-OVER T/ BLACK WELI
								STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 2
								GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. R SET CBP @ 8840' P/U PERF F/
								8807'-10', 4 SPF, 12 HOLES.
								8774'-76', 4 SPF, 8 HOLES. 8745'-47', 3 SPF, 6 HOLES.
								8672'-74'. 3 SPF, 6 HOLES.
								8634'-37', 3 SPF, 9 HOLES. POOH. READY T/ FRAC. AFTER PULLING GUN 8
								SETTING TOOL INTO LUBE, WL TRUCK MOTOR
								DIED @ 10:45 AM. ATTM T/ MAKE REPAIR ON LOC. NEVER GOT TRUCK RUNNING AGAIN.
								CALL FOR NEW TRUCK.
								( NEW TRUCK PULLED ON LOC @ 4:30 PM. )
								12:33 OPEN WELL 1380 PSI. BEG PUMP, BRK @
								3586 PSI @ 6.4 BPM. SD ISIP 2400 PSI, FG .71. BEG FRAC, PUMP 92,478# 30/50 WHITE & 5,000
								20/40 TLC. SD ISIP 3200#, FG .80.
								1:30 SWIFN.

Well: NBU 1022-7AT (BLUE)	Spud (	Conductor: 1/22/2009	
Project: UTAH-UINTAH	Site: N	BU 1022-7A PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start D	ate: 8/7/2009	End Date:
Active Datum: RKB @5,257.01ft (a	above Mean Sea	UWI: 0/10/S/22/E	/7/0/NENE/6/PM/N/255.00/E/0/646.00/0/0
Level)			P(L) MO:From Copielian
8/11/2009 7:00 - 18:00	11.00 COMP		P STG 3)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8612' P/U PERF F/ 8579'-82', 4 SPF, 12 HOLES. 8547'-50', 3 SPF, 9 HOLES. 8467'-70', 3 SPF, 9 HOLES. 8400'-04', 3 SPF, 12 HOLES. POOH. READY T/ FRAC. 7:56 OPEN WELL 950#. BEG PUMP, BRK @ 2138# @ 6.3 BPM. SD ISIP 2150#, FG .68. BEG FRAC, PUMP 30,498# 30/50 WHITE & 5,000# 20/40 TLC. SD ISIP 2600#, FG .74. 8:20 SWI. X-OVER T/ YELLOW WELL.
			STG 4)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8390' P/U PERF F/8353'-60', 3 SPF, 21 HOLES. 8228'-35', 3 SPF, 21 HOLES. POOH. READY T/ FRAC.  11:49 AM OPEN WELL 1960#. BEG PUMP, BRK @ 2938# @ 6.3 BPM. SD ISIP 2100#, FG. 68. BEG FRAC, PUMP 22,744# 30/50 WHITE & TAIL IN W/5,000# 20/40 TLC. SD ISIP 2650#, FG. 75. 12:05 PM SWI, X-OVER T/ BLACK.  STG 5)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM SHOT, .36 HOLE SIZE.90 & 120 DEG PHASING. RIH SET CBP @ 8134' P/U PERF F/8100'-04', 4 SPF, 16 HOLES. 8069'-72', 3 SPF, 9 HOLES. 8045'-48', 3 SPF, 9 HOLES. 8045'-48', 3 SPF, 9 HOLES. POOH. READY T/ FRAC. 4:45 PM OPEN WELL 1041#. BEG PUMP, BRK @ 3467# @ 6.4 BPM. SD ISIP 1951#, FG. 67. BEG FRAC, PUMP 39,257# 30/50 WHITE & 5,000# 20/40 TLC. SD ISIP 2450#, FG. 73. 5:19 PM SWI, X-OVER T/ BLACK WELL.  STG 6)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM SHOT, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7885' P/U PERF F/7853'-55', 4 SPF, 8 HOLES. 7585'-55', 4 SPF, 8 HOLES. 7798'-00', 3 SPF, 9 HOLES. 7798'-00', 3 SPF, 9 HOLES. 7708'-11', 4 SPF, 12 HOLES.

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Well: NBU 102	2-7AT (BLUE	)	Spud C	onductor: 1/22/2	009	Spud Date: 2/6/2009
Project: UTAH-			Site: NE	U 1022-7A PAD	1	Rig Name No: MILES-GRAY 1/1
Event: COMPL	ETION		Start Da	te: 8/7/2009		End Date:
Active Datum: I	RKB @5,257.	01ft (above Mear	Sea	UWI: 0/10/S/22	2/E/7/0/N	ENE/6/PM/N/255.00/E/0/646.00/0/0
Level)					Sec. Comme	Y S
<b>Care</b>	GLIE				HU.	MD From Specific
8/12/2009	7:00 - 18		COMP	36 B	P	STG 6)8:49 AM OPEN WELL 1220#. BEG PUMP, BRK @ 3198# @ 6.4 BPM. SD ISIP 1700#, FG .65. BEG FRAC, PUMP 48,870# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2400#, FG .74. 9:19 AM SWI, X-OVER T/ BLACK
						STG 7)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7598', P/U PERF F/ 7564'-68', 4 SPF, 16 HOLES. 7596'-00', 3 SPF, 12 HOLES. 7448'-52', 3 SPF, 12 HOLES. POOH. READY T/ FRAC. 1:PM OPEN WELL 940#. BEG PUMP, BRK @ 2804# @ 6.4 BPM. SD ISIP 1900#, FG .68. BEG FRAC, PUMP 17,381# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2400#, FG .75. 1:17 PM SWI. X-OVER T/ BLACK WELL. 1:20 PM PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7398'. POOH. SWI.
8/17/2009	7:00 - 7	:30 0.50	COMP	48	Р	JSA RU RD SAFETY
3,172505	7:30 - 19		COMP	30	P	RD FROM NBU 1022-7A4BS RU ON NBU 1022-7AT ND FRAC VALVES NU BOPS RU FLOOR & TUB EQUIP SPOT IN TUB FLOAT PU HURR MILL POBS & 1.87 XN NIPPLE PU PIPE OFF FLOAT TAG SAND @ 7380'
						PLUG #1 TAG SAND @ 7380' {8' FILL} C/O & DRILL THRU HALLI 8K CBP @ 7388' IN 12 MIN W/ 50# INCREASE
						PLUG #2 CONTINUE TO RIH TAG SAND @ 7567' {31' FILL} C/O & DRILL THRU HALLI 8K CBP @ 7598' IN 9 MIN W/ 100# INCREASE
						PLUG #3 CONTINUE TO RIH TAG SAND @ 7855' { 30' FILL} C/O & DRILL THRU HALLI 8K CBP@ 7885' IN 3 MIN W/ 150# INCREASE
						PLUG #4 CONTINUE TO RIH TAG SAND @ 8109' {30' FILL} C/O & DRILL THRU HALLI 8K CBP @ 8134' IN 5 MIN W/ 150# INCREASE
						PLUG #5 CONTINUE TO RIH TAG SAND @ 8358' {32' FILL} C/O & DRILL THRU HALLI 8K CBP @ 8358' IN 2 MIN W/ 200# INCREASE
						PLUG #6 CONTINUE TO RIH TAG SAND @ 8597' {15' FILL} C/O & DRILL THRU HALLI 8K CBP@ 8612' IN 4 MIN W/ 150# INCREASE
						PLUG # 7 CONTINUE TO RIH TAG SAND @ 8808' { 32' FILL} C/O & DRILL THRU HALLI 8K CBP @ 8840' IN 5 MIN W/ 100# INCREASE
			***************************************			CONTINUE TO RIH TAG SAND @ 9020 {187' FILL} C/O TO PBTD @ 9207' LD 20 JNTS LAND WELL ON HANGER W/ 272 JNT OF 2-3/8" L-80 TUB EOT @ 8617.08' ND BOPS DROP BALL NU WELLHEAD PUMP OFF BIT SUB @ 1200 # CIRC TOTAL OF 365' SAND 5.7 AVERAGE DRILL TIME ON CBPS TURN WELL OVER TO FBC W/ ON TUB & ON CAS RECOVERD 4000 BBLS 4359 LEFT

Well: NBU 1022-7AT (BLUE)	Spud Conductor: 1/22/2009	
Project: UTAH-UINTAH	Site: NBU 1022-7A PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 8/7/2009	End Date:
Active Datum: RKB @5,257.01ft (above Mea	an Sea UWI: 0/10/S/22/E/7/0/	NENE/6/PM/N/255.00/E/0/646.00/0/0
Code Time Cognition Standing (pr	Anne Code Sign Ris	MO from Oppgrater
8/18/2009 7:00 -	33 A P	7 AM FLBK REPORT: CP 2400#, TP 1975#, 20/64" CK, 45 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 4725 BBLS LEFT TO RECOVER: 3634
14:00 -	50	WELL TURNED TO SALES @ 1400 HR ON 8/18/2009 - 1300 MCFD, 840 BWPD, FTP 1850#, CP 2500#, CK 20/64"

8/18/2009

3:58:10PM

STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS, AND MINING			FORM 9	
			<b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> ST ML 23609	
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-07AT	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.			<b>9. API NUMBER:</b> 43047402480000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  PHONE NUMBER: 720 929-6587 Ext			9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0255 FNL 0646 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 07 Township: 10.0S Range: 22.0E Meridian: S			COUNTY: UINTAH	
			STATE: UTAH	
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
NOTICE OF INTENT Approximate date work will start:	ACIDIZE	ALTER CASING	CASING REPAIR	
	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION	
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	
DRILLING REPORT Report Date: 5/17/2009	☐ TUBING REPAIR ☐	VENT OR FLARE	WATER DISPOSAL	
	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION	
3/ 1// 2003	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  FINISHED DRILLING FROM 2240' TO 9260' ON 05/16/2009. RAN 4 1/2"  11.6# I-80 PRODUCTION CSG. LEAD CMT W/360 SX PREM LITE II @10.7 PP&ccepted by the 3.48 YIELD. TAILED CMT W/1350 SX 50/50 POZ @14.3 PPG 1.31 YIELD. Utah Division of DROP PLUG AND DISPLACE W/142.7 BBLS FRESH WATER @2250 PSI BUNDII, Gas and Mining PLUG @2886 PSI FLOATS HELD W/1.5 BBL RETURNS GOOD RETURES RECORD ONLY THROUGH OUT JOB & DISPLACEMENT 12.7 BBL FRESH WATER SPACER BACK TO SURFACE NO CMT BACK TO SURFAC.E L/OUT LANDING JT SET & LOCK IN PACKOFF @5000 PSI 15 MIN. N/DN BOP EQUIPMENT CLEAN SHALE TANK.  RELEASE ENSIGN RIG 139 ON 05/17/2009 AT 1500 HRS.				
NAME (PLEASE PRINT) Sheila Upchego	<b>PHONE NUMBER</b> 435 781-7024	TITLE Regulatory Analyst		
SIGNATURE N/A		<b>DATE</b> 5/19/2009		